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THE MARYLAND FARMER:

DEVOTED TO
Agriculture, Horticulture, and Rural Economy.

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The Influence of Horticultural Societies.

It is evident from the universal existence of Agricultural Societies that they have met a want which nothing else could supply. We have a leading one in every State, most counties with any considerable population sustains one, and these counties are again often sub-divided into districts where an agricultural club, or society of some kind, is almost sure to exist.

These take into their charge all questions that relate to cattle and crops. The best breeds and best manner of production, the best corn, or grain, or grass, and the best methods of culture, fruits and vegetables, and even flowers, when they are an especially marked product of farm life.

All these matters attend us in our first struggle with existence. But no sooner do we raise material enough to clothe ourselves with, than we trouble ourselves about the texture of the article, and the peculiar cut of the cloth. We cease to care for something—anything to eat or drink—anything so long as we are filled and life healthily sustained, but we sigh for delicacies and beauties—a higher development than mere agricultural prosperity will supply. Hence comes the Horticultural Society. Horticulture is an outgrowth of agriculture, but does not supersede it, it is indeed a refiner, a polisher, finishing off what agriculture begun. It is not a question of wealth, for horticulture applies as well to a few pots of flowers in a window, or the single fruit tree in the back yard, as well as to the orchard of a thousand trees, or the proprietor of the best arranged or most luxurious grounds.

The influence of horticulture has not been so deeply felt in our own country as in others, but even here it is making itself a name. Fruit culture as recently shown in our pages, would never have made the progress it has in this country, but for the influence of our leading horticultural societies. American fruit culture is at the present time the wonder of the whole world. People often say we have not gardening as England has, but this is

chiefly in relation to the higher art displayed in landscape gardening, and in the culture of flowers. These all have, as we have said, a great influence on the pleasure of the community, and which we hope will come here also, after a while. In strawberries, half the people of Europe never tasted a berry, yet here none are so poor but can enjoy them. So of all other fruits, most of these are still but luxuries and out of the reach of many person's means.

The immense abundance of everything here in the shape of fruit, always strikes a new comer with surprise.

As we have said we owe most of this to the influence of good horticultural societies, and it is a pleasure to every lover of good fruit to see these institutions growing, and receiving flattering attentions in every large city in the land.

Flower culture and Landscape gardening, the two branches in which perhaps we in America are necessarily the most behind hand in will, no doubt, soon follow. Where these institutions have long been established, the floral parts of the exhibitions are among the best patronized, and it is noted in all these displays that the best flowers come from the best citizens and from the best people in the community. Near all our large cities, those districts which have the most flowers and fruits, are the most moral and most intellectual. This is not mere sentiment, but an actual fact, which a reference to police statistics will abundantly show.

All over the country there seems to be a great horticultural revival, and we are glad of it. The influence it has already had for good on the community has been great, but we really believe that even the best advocates for the extension of horticultural influence, have no idea of the good results that will follow its further growth.

NEW VOLUME FOR 1875.

The next number of the MARYLAND FARMER completes the present volume. In January the volume for 1875 begins. We ask the assistance of our friends to greatly increase our subscription list.

*Agricultural Calendar.***FARM WORK FOR NOVEMBER.**

This is a pleasant month for the farmer, the winding up of his year's labor in finishing gathering in the crops. It is to be devoutly wished that our friends may find that they have been well rewarded for their anxieties and labors. Where little has been made the greater necessity to take good care of it, and use it economically, and examine well into the causes of failure. It may have in part or in whole been the result of wrong management and not entirely the fault of the season. In regard to corn, for instance, enquire of yourself if the ground had been plowed deep enough, the crop never suffered for work, and was the land kept often stirred during the drought? These are important matters, that go far to ameliorate the effects of droughts.

CORN.

The corn crop should be husked and cribbed as soon as possible. The fodder well taken care of and a good supply ricked near to the barn yard, for feeding, when the weather is bad. It is slow and disagreeable work to haul fodder in snow, or rain and sleet, and it ruins the crop or land over which it is hauled, when the wheels cut deep in the ground.

TOBACCO.

We presume the tobacco crop is all "housed" and the planter has only to wait until it is sufficiently cured to be stript. In the meantime he must persevere that course of vigilant attention to it which we recommended last month. Many a crop of fine tobacco has been ruined this month by negligence. Most tobacco is now in the half cured state when its color and texture are being established, and is dependent greatly upon the weather and circumstances. During fine weather, like Indian Summer, or cool, clear days, with brisk wind, tobacco cannot be exposed too much, but it will be ruined or much damaged if it be not protected securely against damp, rainy weather, as also against storms and high winds. The latter will dry it, it is true, but when dry or the parts of the leaf that is dry, will become cracked and brittle, and never return to the soft, tough, kid-glove feel, which prime tobacco ought to have. It is therefore very important that this month strict attention should be given to opening and close closing of the tobacco barns according to the condition of the crop and the state of the weather. Experience must be the guide in this matter.

RYE.

If circumstances have prevented the rye crop from being sown, it should be done at once, and

with a fair prospect of a good crop, if pains is taken in the seeding of it. Those who soil their stock, or desire good, early green food for the milch cows and other stock, ought to prepare a piece of ground nicely, enrich it, and sow two bushels of rye per acre, harrow it in and roll. By sowing so thick, the crop will be earlier, and the straw finer and more tender. Commence cutting when it is a foot or eighteen inches high, before the head begins to form, and you can get a second crop. It is a very valuable soiling plant. It should be partially dried before feeding; that is, cut in the morning what is wanted for feeding in the evening and next morning, or it may be cured still more. The mules, cattle and horses, eat it with great relish. It is fine for young cattle and colts. Hogs like it too. It is estimated that one acre will soil six mules and three cows for two months, if one-third of the acre had been sown at intervals of two or three weeks, so as to let it come on in rotation. The first sown will do to cut the second time, by the time the last sown is consumed.

Those who have sheep would be benefited by sowing two bushels per acre on the corn land intended for oats next spring. It would give good pasturage from 1st of February for ewes and young lambs or mutton sheep, until it was plowed under for the oat crop. If the soiling system be pursued, and it is to be highly commended, after the rye, oats, clover, millet, and broadcast or drilled corn, planted for the purpose, will come in use in the order named. Some sow wheat for the same purpose, which comes between the rye and oats, allowing more time for the oats to make growth, for they are all the better if they begin to head, or have almost ripened the grain before they are used up.

TURNIPS AND RUTA-BAGA.

Before the hard freezing spell comes on pull up the turnips and ruta-baga, cut off the tops, which can be given to the cattle and sheep, and then put them away for winter in stoops of 50 or 100 bushels. Dig a trench in dry ground, four feet wide, two feet deep, and as long as suits you, and according to the quantity to be put away. Fill the trench and raise the heap above ground to a sharp top, in the form of a house roof, cover with straw and then earth sufficient to keep them from freezing. They will keep sweet. Pat the earth hard and make it compact with a narrow top, so as to shed rain.—Cut a drain around each pile or trench, to keep all water out. A slanting hill side is best to have the stoops upon. For convenience when wanted for use, it is best to take out at a time 50 or 100 bushels, and put them in the barn or barn cellar.

These crops are very valuable, yet they are not

properly appreciated by a large number of our farmers and stock growers. Large crops can be grown on a small piece of ground at little cost and labor. They save grain and hay, and supply in a great measure the green grasses, thus becoming healthful correctives for animals fed on dry food. Plenty of turnips enable the farmer to keep for breeding, or feed for the shambles, more stock, thus adding hugely to the manure pile. The white turnip and some of the yellow varieties may be sown after the wheat and oats are harvested, and the land manured with that made and saved since the barn yard was cleaned out in the spring. Even ruta-baga could be planted, if they had been sown in June, for the purpose of transplantation, like cabbage, thick in a bed.

POTATOES.

Dig your potatoes and put them in the cellar or in stoops as directed for turnips. Dig in dry weather and let them dry before putting them away. They will go through a sweat for a few days after digging. Do not expose them to the sun long, as it will turn the skins green and injure the looks.—If the weather is dry, let them lie in heaps in the field for a day or so, with a little straw over them, they will be fit then to go into winter quarters. If you can get a fair price for them, send them to market as fast as you dig, so as to avoid the glut which the North will create in our markets from December to April. The land intended for both early and late potatoes next year ought now to be heavily manured and plowed deep, and harrowed and sown with plaster, to prevent the escape of ammonia. By the spring the manure will be well incorporated with the soil.

SHELTERS.

In the field intended for wintering the sheep and calves, build shelters open to the south, on poor hill sides, cutting a small trench on the upper side to turn the water. Build them of cedar or pine brush, corn stalks or straw, so that they will keep out the wet and the cold. Have troughs in each and cover the floor with leaves. Keep salt in the troughs, which will induce the sheep to use the sheds, and will naturally retire under them of nights and bad weather. Build one or more small ones, with a pen attached for ewes about to yearn.

ICE PONDS.

Be sure and fix up your ice ponds early and get them filled, that any defects in the banks may be discovered and rectified before the ground is frozen. The banks will grow solid by the time of freezing weather, and standing the fall rains, will be a guarantee that they will not give away when they

are most wanted to be firm. We often have ice early, and every one should be prepared to take advantage of the first freeze, to secure their ice, which habit, and its value in sickness, has made it a necessity as well as a great luxury.

PLOWING AND CLEANING THE FIELDS.

The fields intended for crop next year ought to be gone over, and the briars, bushes and stumps, dug up and hauled to the poor spots most convenient, to be burned when dried. The surface stones picked up and put in the mouth of gullies, or broken and used for the repair of the roads on the farm.—All stiff, rough places ought to be plowed deep and subsoiled. All parts of the field where water lays near the surface must be drained.

MANURE.

The manure which has been accumulated during summer should be hauled out and spread, no matter how coarse it be, over the thin places in the newly set grass lots. We have always been from thorough conviction of its propriety, the advocates of top-dressing with a sprinkling of plaster over the manure as soon as it is spread. Haul in materials for swelling the winter's manure pile. Cover the barn yard with muck, woods earth and leaves, a foot deep. Every consideration induces this to be done. In damp weather secure a large supply of leaves for bedding for the hogs this winter, and for sheep shelters.

STOCK.

Let the sheep and young stock have a good pasture. Milch cows and work-cattle must be fed night and morning with pumpkins and corn-fodder, or some sort of vegetable food. The pumpkins boiled with little water, and mixed with a quart of meal or half gallon of bran or mill feed, to a half bushel of pumpkins, is a good milk producing feed for the milch cows. All stock ought to be protected from the cold storms we often have in this month. After the heat of summer, the sudden changes of autumn are sensibly felt by these animals. The first cold storm they feel more than those that follow; so too with sheep, whose coats are still short.

HOGS.

The fattening of the hogs for pork ought to be hastened, as they take on flesh and fat in mild weather faster than they do in cold. We give the following result of an experiment made to ascertain how far cold retards the rate of fattening, reported in monthly reports of the Agricultural Department:

“A producer of pork in Muskingum County, Ohio, who has made an experiment with hogs, with a view to ascertain how far cold retards the rate of fattening, reports the following results; Carefully

weighing the hogs fed, and the corn fed to them, and estimating pork at four cents per pound, he found that what he fed out during the first week in October returned (in pork) 80 cents per bushel; the first week in November, 60 cents; the third week 40; the fourth week in November and the month of December, 25; the first half of January, 5; the last half, 0. In the October week of the experiment the weather was pleasant and warm.— It gradually grew colder till the latter part of November, from which time it remained about stationary till the 1st of January, after which it ran down to zero, and below in the latter part of the month. The hogs were well sheltered in a good pen with plank floor."

This is convincing proof of the importance of fattening your hogs early. Keep them on plank floors for sleeping at any rate, keep the pens clean, and hogs too if you can. Let them have access to clean water, charcoal or rotten wood. Give salt in their food or drink every few days, but be careful and not give too much, for salt will kill them if in large quantity. Make the water brackish only, or the food just seasoned with it. They should have soup made of vegetables, pumpkins and bran, once a day, and twice a day fed as much as they will eat of new corn, or mush made of small potatoes and corn meal, or oats, and rye, or peas and grain, well boiled and allowed to grow slightly acid. With a little trouble and time expended, and the proper articles of food secured, pork can be made rapidly and very economically. Its high price at present should stimulate every man to raise his own pork and enough over to sell, to pay for his money outlay for hire of the swine-herd, and the articles of food purchased. Pork-raising is certainly profitable at the present time if properly conducted.

PLANTING TREES.

Any time this month, if the ground is not frozen, is not too late to plant fruit, ornamental or forest trees. After planting raise a mound about them to steady them, and to be leveled early next spring. Every reader must be satisfied that tree planting is a branch of agricultural duties that cannot be neglected. No man can be called a numl or one farmer who has not an ample supply of fruit and nut-bearing trees, large forest trees over his lawn and along the outlines of his farm. If the estate is scarce of timber or fencing stuff, trees suitable for those purposes should be planted or the seeds sown in the vacant places in the woods, or a special lot appropriated for the purpose. Some will say, "I am too old to plant trees." But he forgets in his selfishness, posterity. A great lord in England, after he was forty years old, set out a tree plantation, of trees suitable for ship building, and before he died he built a large ship out of that very plantation, besides, he sold \$100,000 worth of

splendid timber. There is encouragement in this fact for all to "go and do likewise."

CIDER MAKING.

No better time than this month to make good cider, which will keep sweet and afford a wholesome beverage all winter. If the pumace be saved and moistened well with water, permitted to stand a few days, and again pressed, it makes good vinegar, and if in the spring it be drawn off clear of the settlings, which will be considerable, and one gallon of molasses and two of common whiskey be added with a little yeast, it will very soon become superior vinegar, better far than the poisonous manufactured article sold in towns.

For the Maryland Farmer.

Seeding to Grass—the Criticiser Criticised.

In the last number of the *Maryland Farmer*, your special contributor, N. B. W. takes for a text the seeming variance of two correspondents articles on seeding to grass, which appear in the *Country Gentleman* of August 27, and calls particular attention to points discussed by each, approving with one while he seems to argue "that there is not the necessity commonly supposed for the elaborate preparation recommended by the other," &c.

The writer of this too has also read the articles in the *Country Gentleman* referred to, and fails to see in the same light of N. B. W. the force of his criticisms. While the writer whose system he criticises treats simply of *mowing* fields as they exist in the severe climate of New England, the other treats of *grazing* fields as his experience in England where the climate is more mild and the atmosphere more humid; with a soil and climate much more congenial to grass than is that of New England. The beauty of a grazing field is the short fine grass, thick heavy sward, which is promoted and encouraged under the treatment of "Grazing Lands," which would prove the reverse with mowing lands, as there quantity as well as quality, is desired and is obtained more fully when the grass is not only thick set on the ground, but also grows to the greatest height; and these are found in experience, best obtained by a *thorough* preparation and seeding as there recommended. That it is necessary many fail to coincide, at least in practice; and what is the result? simply that they obtain lighter crops and the seeding needs oftener renewing, if kept to mowing, so that barely on the score of economy, in seeding to grass for mowing, it is better to be thorough as there recommended, while for grazing the other course may be adopted, resulting with less immediate loss; and natural grasses fill in as artificial disappear, giving what is needed for grazing, but of very much less value, acre per acre, for mowing and hay.

GIARDINIERE.

GARDEN WORK.

GARDEN WORK FOR NOVEMBER.

There is a good deal to be done in the garden this month. It is the clearing up time and for storing away some of the crops, and putting others in trim for winter.

Cabbage.—Store the cabbage for winter, by smoothing off a space level, set the cabbage as close as possible in four rows, heads down and roots up, inclined to the centre, then cover with three or four inches of dirt, forming a pile in form of a rick with a sharp top, beat the earth compact and open a trench to turn off the water. Another plan is a good one; open a furrow with a plow, set the cabbage close, slanting slightly against one side of the furrow, then the next furrow thrown against the cabbage will cover the roots—six or eight furrows will be wide enough for a pen—set forks at the corners and along the sides, those on the south side higher than the opposite ones. On these forks lay poles and on them cross sticks, and cover with corn fodder, straw or evergreens, around the sides and ends set up corn stalks thick. They are ready to be cut any time, and the stalks are ready to yield early sprouts. All small cabbages should be put away in this manner.

Beets, Parsnips, Carrots, Potatoes and Turnips.—All these roots should be taken up and stored in dry stoops, in conical shape, covered with straw or leaves, and then with dirt, to keep out frost, or placed in the cellar and covered with straw. The parsnip and carrot is better to be left out all winter and dug as wanted, or only a small quantity dug at mild intervals through winter.

Celery.—Finish earthing up the celery and secure it from frost by a covering of leaves, straw and corn stalks over the rows, so thick as to exclude both cold and wet.

Small Fruits and Shrubs.—Set these out before the 15th of the month.

Culinary and Medicinal Herbs.—These may be planted in the early part of the month.

Tomatoes.—If your vines have half ripe tomatoes on them, pull up the vines and hang them in your barn, and they will ripen and lengthen the tomato supply for weeks.

Spinach and Kale.—Cover lightly with pine or cedar boughs, the kale and spinach, to afford some protection to the plants.

Cabbage Plants and Lettuce.—Do the same for these that we suggest for spinach. The lettuce in the cold frames may be worked and occasionally watered. Attend to the sashes. Such lettuce as

you desire to force, can be kept covered with the sash and watered with liquid manure occasionally about the roots, sprinkling the leaves with clean water. If it grows large and does not head, tie it up.

Wet or Stiff Spots.—If there be any wet places, underdrain them, and spade deep all the stiff, hard spots in the garden, leave it in the rough for the frost to act on and pulverize.

Strawberry Beds.—Work the beds and mulch well. The same may be said of the asparagus beds. If our advice in regard to these beds has not been followed, it is not too late now to do so, neglect it and you will possibly experience the propriety of our suggestions next year, in a diminished quantity and inferior quality of strawberries and asparagus.

CAUSE OF YELLOWS IN PEACH TREES.

The following letter from David Pettit explains itself, says the *Peninsular News*, and like all communications from this experienced farmer and fruit grower, will be read with interest:

C. Barker—Esteemed Friend:—I have read the *Peninsular News* and *Advertiser* containing the article by D. S. Myer on the causes of Yellows in Peach Trees, for which please accept thanks.

The trees presented at the meeting on the 29th ult. had, without doubt, the yellows; but that the yellows were caused by plant lice at the roots, I cannot believe. I have taken up young trees with all their roots carefully, and examined them critically from top to bottom with out finding an insect of any kind about them, while dying of the yellows. The unhealthy state of the tree may predispose it to plant lice, and they may attack it in certain localities in consequence. This I think very probable, but is the result rather than the cause.—The patches I spoke of among nursery trees dying of the yellows, and which I mentioned in my former communication, gave me a good opportunity to test this fully, which I did and found no insect.

In the spring of 1860 I planted a field with corn and had a good crop. The next year I fenced in the best part of the field for a fruit garden and truck patch. I furrowed out the ground and manured in the hill some days before planting; after planting, the corn came up the louisiest I had ever seen, and every crop I attempted to raise that year, even beans and weeds were taken at the roots, but not the trees. The peach trees remained healthy.—The next year it was the same way—every thing planted was attacked with *aphides*. I resolved then on the sure remedy—to starve them—which I did by destroying every green thing and keeping the ground clean that year; and they have never troubled me since.

My opinion is, as I have said before, that the yellows are caused by a want of some element in the soil indispensable to the growth of the peach tree. All my experience goes to prove this.

For the Maryland Farmer.

OUR PEAR ORCHARD.

B. D. Z. EVANS, JR.

I am not yet prepared to give a regular statement of the receipts from our pear orchard, as we have varieties which, at the date of writing, have not yet been marketed, but when all have been sold and the returns come in, I will give such account to the readers of your paper. I will here merely give some few facts relating to varieties, care, &c., telling which have been found to pay with us; but I wish to say, in this connection, that when I speak of varieties I have in view their desirable or undesirable qualities for *market* purposes and not merely for *home* use which may, consequently, differ from the opinions of other pear culturists.

Our orchard soil is of about medium texture, well underdrained and yearly supplied with manure and well cultivated. We have both standard and dwarf trees, but planted our dwarf trees some four or more inches below the graft, so the pear stem would strike root and make what is known as a half standard. This plan does not prevent the tree from fruiting equally as early as a regular dwarf, while it makes the tree grow, in a few years, nearly as vigorous as a standard, thus combining the excellencies of both kinds. This season has been a very dry one, with cool nights and warm days, more especially during the ripening season, and this accounts for the fruit being fit to gather several days, in some cases two weeks or more, before it should have been picked in an ordinary season. The fruit did not ripen up all at once, but part of it ripened at a time, causing us to pick over one variety three, four and sometimes five different times. Our first Bartletts, standard, were shipped on the 17th of August, as also was the Doyenne Boussock (dwarf) which is a very handsome pear when thoroughly ripened. It bears heavy crops and is a strong, vigorous grower and bears regular specimens when properly cared for. The rich bloom on it makes it very salable. The Bartlett (standard) bore very heavily with us, as it always does, many of our specimens weighing, with no attempt to grow brag specimens, over 20 ounces, which I think is a fair exhibit. The Kirtland, (dwarf) ripened about the 17th or 18th August, and did comparatively well with us. It is a seedling of the Seckle, raised by a man of that name in Ohio. The Lodge (dwarf) is a fine, large russet pear, and bears well, and may make a good market variety, though its heavy coat and not very fine flesh may be an objection to it. The Louise Bonne de Jersey (dwarf) bore heavy crops of fruit, and, though it is an excellent table variety

and of good size, when properly cared for, yet I think there are other varieties better for market purposes. If it was not for the Howell (standard and dwarf) having the very bad habit of rotting at the core, especially if left on the tree until nearly or quite ripe, I would not wish for a better variety, as it is a very heavy bearer; the fruit is large and of splendid appearance when picked off before quite ripe, and ripened under blankets, and sells well. The Vicar (dwarf) is a very heavy bearer, and is a very pretty tree, with heavy, deep green leaves and vigorous growth. The white Doyenne, which we commenced to pick on 24th Aug. are really very fine when they can be grown free from cracks and spots, but the older the tree the more liable the fruit is to become worthless from these two causes. The Onondaga (dwarf and standard) is a fine, large pear, and bears heavily, or rather medium. It is known to some as Swan's Orange; when ripened in the fruit room it colors up very finely, not very unlike the coloring of an orange. The Flemish Beauty bears, each year, heavy crops of large fruit, but has the habit of dropping its leaves just before or about the time it ripens its fruit. The Lawrence bears moderate crops of fruit and grows very well. It ripens late,—is one of our winter pears. The Glout Morceau (dwarf), is a comparatively good bearer, though we have other varieties which we prefer to it for several reasons. The Belle Lucrative bears regularly, heavier crops than any other variety which we grow, and despite the thinnings which we give from one to three times during the season, going over our entire pear orchard, we are compelled to prop up our trees to prevent them from breaking down with the great load of fruit. This year, especially, we had to prop up very many of our trees of several varieties, though some were overlooked, and naturally suffered the penalty.—We have other varieties in our orchards, such as the Sheldon (dwarf and standard) which is a splendid pear in every respect; the Urbaniste (dwarf); Stevens' Genesee (dwarf), a very, very poor pear with us, and several others, but wish to try them further before reporting on their merits and demerits.

It would afford me much pleasure to hear how the different varieties acted with others. Let us hear from you, pear growers.

We have the dwarf and standard of most of the varieties enumerated above in our older or experimental orchard, while we have curtailed the list very materially for our later plantations.

It will require at least 700 ships of 1200 tons each to carry the surplus grain crop of California to market this year.

For the Maryland Farmer.

SHEEP FOR LAMBS AND WOOL.

It always happens, when a strong impression has been made upon the public mind as to the profit to be derived from any given crop or production, that a rush is made toward it, which often brings failure and sometimes disaster in its train. We can all remember illustrations of this in the past. So much has been said, of late, and so strongly, of the profits of sheep, that we may expect something of the same sort in this direction—a great increase in the purchase of stock sheep, and then in the lamb and wool thrown upon the market, with falling off in the price of these. Add to this that very many without knowledge and experience will still hope to make the large profits, reported of isolated small flocks, and will overstock themselves and otherwise encounter the loss consequent upon inexperience.—Sheep raising therefore, which is popular to-day, may become unpopular after a few years of such experience as is here indicated. Then will come the opportunity of such as begin now prudently and with good judgment, though they may suffer in the mean time by having a good business overdone in a spirit of speculation.

Even where profits may be largely reduced for a time, by having the business overdone, it is a satisfaction to the judicious and skillful to be assured that they may hope for moderate success at the worst, with large chances in their favor under propitious circumstances.

My purpose is to make some suggestions for the benefit of those wanting experience in sheep raising, as to several methods practised and the kind of sheep to be used, having reference especially to lambs as the chief item of profit; it being assumed that a large proportion of the seasons of the *Farmer* are within reach of one or other of our great markets.

Merino sheep are excluded from consideration, for however profitable for wool, there is a prejudice at least which excludes them when table use is in view. The full-bred of any breed are excluded as being too costly in the beginning where a stock is to be purchased. Whether or not it may be advisable to begin with a small stock of thorough breds and breed up to the number required for a full flock, I need not now consider. It is quite practicable however to do this in conjunction with the ordinary course, if desired.

The most directly and immediately profitable course is to buy what the Baltimore butchers call "open-wool" ewes, or what we commonly call "country-sheep," of no special breed and not Merinos.—I object to Merinos only on account of the preju-

dice against them; otherwise I should feel tempted to follow Mr. Harris of the *American Agriculturist* and others who cross the Merino with the Cotswold with great success. The ewes should be selected, though costing a little more, and should not exceed two or, at the most, three-years. For a flock not exceeding fifty, one ram at least eighteen months old, should be provided, of Southdown or Cotswold thorough bred.

Whether Southdown or Cotswold, should depend upon the character of the pasturage. On all old field pastures thin and shrubby, light and active sheep are wanted, and the Southdown will be more suitable whenever it may be designed to keep any portion of the young stock for breeders. Otherwise, and on all good grass land, the Cotswold are better for their early growth and weight. Especially are they more suitable when grain feeding is designed. The impression that only a small flock of Cotswolds can be kept in health in the same flock, there is abundant proof is unwarranted. The Southdown however will be generally preferred in Maryland and Virginia wherever it is proposed to make a flock of grade ewes. As the pastures improve and a larger sheep is wanted, the Shropshire makes an admirable cross for the purpose, on the Southdown grades, or the Cotswold may be then resorted to.

As to the length of time that a flock of ewes should be kept the practice varies somewhat. In New Jersey, where the raising of lambs for market is a considerable business, the ewes are bought in September and bred, and the lambs produced are taken from them and sold so early that the flock of ewes are fattened for mutton and sold before another flock is bought to take their places.

In Maryland it is more common to keep the flock of ewes on, to produce another and perhaps a third year's increase. It is argued for the latter method that having a good healthy flock it is not advisable to run the risk of getting such as may prove otherwise, and that the flock kept, will have increased in value for mutton at the end of another year without cost.

The former method is more business-like, the whole sum invested being turned over within the year with a very satisfactory profit. To have it succeed well there should be careful management. It would be desirable to have the lambs come by the middle of March and all disposed of by the last of June or the middle of July at farthest, that the ewes may have time to fatten. After the middle of August, a half pound of grain, oats or corn, to be increased gradually to a pound, for each ewe daily, until disposed of, would make mutton of the best quality, and leave a large quantity of the richest

manure. One or other of these methods is no doubt the best for profit under ordinary circumstances.

Such as would gratify a taste for good stock and have a good profit at the same time will prefer to begin with a stock of common ewes and thoroughbred ram, and keeping the ewe-lambs every year for breeders, to be covered again by a thoroughbred. So in a few years a stock of ewes will be obtained, not appreciably inferior to the most costly Southdowns or Cotswolds for all ordinary uses. It is by no means improbable that such a flock, handled with care and skill and judiciously fed with grain when preparing for the butcher, would give a larger profit than the others. It is one of the advantages of the high-bred stock that grain may be fed to them with certain profit; and our farmers will soon begin to realise, we hope, that the more grain they can feed out on the farm without loss, the better for the farm and the farmer.

Let the inexperienced begin this business with caution and moderation, remembering that small flocks of sheep like small flocks of poultry, are always proportionally more profitable than large flocks.

N. B. W.

For the Maryland Farmer.

FARMING versus PLODDING.

If any one of the ordinary pursuits of man is grand, beautiful, and marvellous, it is that of Agriculture.

Of course we do not mean that merely plodding through furrow, field, and stable; but we mean the broad and scientific business of producing, preparing and marketing the various sacred products of the Earth—for they are sacred, because life-producing and life-preserving. All nature works for and with the farmer, as well when he sleeps as when he works; no one else works and walks so near to God as the faithful farmer; and no one else has so much cause to feel so great dignity in his pursuit as he who raises the bread, and meat, and fruit, to feed and luxuriate the people; and when all who are engaged in that work properly appreciate the importance and dignity of that business, it will be found to possess more charm and attraction than any other calling among men.

The great principles of public policy should be studied and understood by farmers. It is not enough that the farmer knows how to raise his crops and stock, and plod along on his farm; but he should know all about and look into the finances, the markets, the transportation, and the legislation of the country; and not only that, but he needs also to acquaint himself with the productions and

markets of the Old World; the demand and supply, the surplus or short crops of Europe and Asia, really determine the market prices of the products of our own country. The large or small crops of America have very little to do with establishing the current prices at the sea-board; though the failure or excess in some sections of our country will temporarily affect the prices in certain localities, to a small extent for a short time; and the condition of transportation facilities, will also have something to do with local prices, at distant points from the sea-board, for a short time.

With all these things the farming community have need to acquaint themselves fully, with the same care and shrewdness that other classes of business men, watch the conditions and contingences which regulate profit and success of their operations.

When farmers do this their calling will become more attractive and popular—it will have more of the charm of intellectual activity and enterprise.

Then, we shall see less inclination in farmer's sons to seek other business in the towns. Then there will be as much pride and respectability in the profession of Agriculture, as we now find in the professions and mercantile pursuits.

The work is noble and useful of the builder, the engineer, the foundry business, the merchant's calling, and all other honest avocations; but when we consider the importance and the essential necessities for the farmers productions, all those others fall short of the dignity and honor of farming.

Often we see merchants and professional men leave their business and engage earnestly and systematically in Agriculture, and they generally secure results and success which far outstrip most of those who have followed that pursuit all their lives. And the question arises, why do those men so generally largely surpass the old farmers?

We think the answer or reason is—that they bring to their work a broader intelligence of the affairs of the world which control markets and prices; and they also bring to their business that method, and reasoning, and enterprise which secured success in their previous business; they are governed by more order and system, and a better knowledge of the political economy which regulates the affairs of the country.

To reach the highest point of success and honor in his profession, the farmer has need to know more than how to raise his products.

LAND MARK.

(TO BE CONTINUED.)

It is now estimated that the cotton crop of the South will this year reach 4,000,000 bales.

FAT IN FORAGE PLANTS.

To any one not a chemist or a quadruped, the last place to look for fat would be a hay mow or a stack of straw; yet it appears from recent investigations that fat is not only an essential constituent of hay, straw, and similar forms of vegetation, but one of considerable economic value.

In the lower leaves of oats in blossom, Arndt found as much as ten per cent. of the dry weight to consist of fat and wax, the latter appearing as the bluish bloom so conspicuous on the leaves of luxuriant cereals. In fodder crops, generally the greatest proportion of fat is found in young and thrifty plants. Thus Way found early meadow grass to contain as much as six and a half per cent. of fat; while in that of the same meadow, collected in the latter part of June, there was but a little more than two per cent. The proportion of fat is increased by nitrogenous manures: the grass of a sewage meadow at Rugby contained above four per cent. of fat, while similar grass, not sewage, afforded less than three per cent. of fat.

The nature of this sort of vegetable fat was investigated some little time ago by the German chemist König, who found that by treatment with strong alcohol the fat of grass and clover hay could be separated into two parts, one a solid waxy substance, the other a fluid fat, soluble in alcohol. At first he considered the latter to be a true glycerin, but changed his mind after the investigations of Schulz, who proved that though it contains the same proportion of carbon and hydrogen as ordinary fat, the fluid fat of hay is something quite different, since no glycerin can be obtained from it.

König has since confirmed these results and carried forward the investigation, showing that the fat of oats, rye, and vetch seed is similarly constituted. In all these forms of vegetation, hay, oat straw, the grain of oats, rye, vetches, and possibly others, he finds oleic and palmitic acids, not combined with glycerin but in a free state; and as these acids in their combinations are well known as large ingredients of nutritive fats and oils, it is likely that they have a considerable influence on the value of these plants for fodder.

König also finds in hay and in oat straw the important ingredient of animal bile, *cholesterin*; still further, cerotic acid, a waxy body which forms twenty-two per cent. of ordinary beeswax; and two fatty substances new to science, one fluid, the other solid. They are distinct compounds, having the character of fatty alcohols. Another interesting discovery in hay fat is the presence of a hydrocarbon, the relations of which are not fully made out. In several respects, it agrees with some of the paraffins.—*Scientific American*.

LIME.

A New Oxford, Pa., correspondent to the *Ohio Farmer*, discusses the four forms of applying lime to the soil:—

There are four forms in which lime is applied to the soil. 1st. Quick lime, or lime freshly burned. 2d. Hydrate of lime, or a chemical compound of water and lime. 3d. Air-slaked, or mild lime—which is partly hydrate, and partly a carbonate.— 4th. Carbonate of lime. This may be limestone crushed, or chalk finely pulverized, or it may be lime which has become mild by the absorption of carbonic acid from the air.

It is thought by many, that if the limestone could be crushed in a cheap way, it would be better to apply it so than to burn it at all. It has been tried here and not approved of yet, however that may be, experience and philosophy will teach that it is a mistake to apply lime to soils in a caustic state, particularly to light or sandy soils. If the soil be stiff and cold, if it is newly drained, containing much organic matter in an inert or acid state, or if there are tough, obstinate grasses to destroy, it may be well to apply quick lime. As a general thing, lime should be allowed to slack spontaneously by the addition of a sufficient quantity of water to reduce it to a dry powder. If used in a wet state, it is liable to form compounds with substances in the soil, and thus become hard like mortar. It is generally admitted that caustic lime does not do much good the first year. By the second it has become to some extent a carbonate; this furnishes a strong hint that it should be applied as a carbonate.

Again, hydrate of lime is about thirteen times more soluble than the carbonate; hence there is greater liability to its loss by being washed out by heavy rains; while the carbonic acid present (if the lime be partially carbonated), dissolves both hydrate and carbonate to a sufficient extent to furnish food to plants.

Lime has a constant tendency to sink in the soil, and this fact taken in connection with the preceding, is an argument in favor of small applications at a time, and of repeating the dose more frequently. Lime should be applied in the finest state of division, and from its tendency to sink should not be plowed in but spread on the top just before the last harrowing. The object is to mix it thoroughly with the soil, but not to let it escape into sub-soil.

Mr. Levi Ballou, of Woonsocket, Rhode Island, it is said, bred from one pair of pigs ten years without introducing any fresh blood. Over one thousand pigs were raised during the time, and without producing a single imperfect specimen.

The Greatest Crop of the World.

A question widely discussed involves the relative value of the wheat, cotton, tea and hay crops of the world. Which of these products employ the greatest amount of the world's capital? It is said that hay leads the rest, and the items that enter into the account as stated are somewhat startling, and will make a Granger's hair stand on end. Cotton and tea are local crops, while hay is produced everywhere the world over, and thus the hay crop greatly out-weighs either of the other two. The aggregate reported value of all farm products in the United States for 1870 was \$2,447,538,658; but as this includes additions to stock "betterments," etc., it is probably too high. Now the hay crop for that year—that is the grass dried and cured for use or sold—is reported at over 27,000,000 tons. This, at half the selling price in the large cities, would amount to \$405,000,000, and is far greater than the aggregate home value of the cotton crop or any other crop. But the cured "hay" is but a portion of the grass crop. The other portion is used on the ground, and it requires considerable calculation to get at the value so used, even in the roughest way. In the first place live stock, including horned cattle, horses, sheep, swine, etc., to the value of \$1,525,000,000, were fed from it that year. Averaging the lives of these at five years, we have one-fifth of that sum as representing the grass fed to them in 1870, viz.: \$305,000,000; next we find the value of the animals slaughtered for food in that year to be \$309,000,000, and as this is an annual product, the whole of it will for the present be credited to the grass crop; next we find that the butter crop of 1870 was 514,000,000 pounds, which at the low average of twenty-five cents, amounts to \$128,000,000, and this goes to the credit of grass; next we have 235,000,000 gallons of milk, which, averaged at the low estimate of ten cents per gallon, adds \$25,000,000 more to the credit of the grass crop; then we have 100,000,000 pounds of wool at twenty-five cents a pound, adding \$25,000,000 more; and, finally, 53,000,000 pounds of cheese at ten cents, adding over \$5,000,000 to the total credits to the grass crop of 1870, which aggregates \$887,000,000. Now, let us add the value of the "hay" crop as given above—viz.: \$405,000,000—and we have a grand total for "hay" and the products of grass consumed on the ground amounting to \$1,292,000,000! This is, of course, subject to deduction, as the meat, butter, milk, cheese, and wool-producing animals consume other food besides grass and hay. To make ample allowance for this, we deduct the entire value of the corn and oat crops of 1870, esti-

mated at \$270,000,000, and this leaves a remainder of \$1,022,000,000 to be credited to the hay and grass crop of that year, when the reported aggregate of all farm products was \$2,447,528,658. If our estimates make even the roughest approach to accuracy, the value of that crop was two-fifths of the aggregate value of all farm products, and hence we may infer that two-fifths of the capital then invested in agricultural pursuits was devoted to the grass crop, and this in the United States equals (in round numbers) \$4,575,000,000. From these figures the deduction is palpable that King Cotton is uncrowned and dethroned, and we may be forced to admit that all "flesh" and all else is hay, if not "grass."—*Hay, Straw and Grain Reporter.*

Why Wet Land should be Drained.

Free access of atmospheric air to every part of the soil is of the utmost importance. The air assists the various processes of decomposition by which dead animals and vegetable matter is made to yield products of the highest value as elements of the food of plants. If the soil is full of water, of course the air cannot get into the soil to perform this office. Hence, drains by drawing off the water beneath, give the air free admission to the soil, and each shower of rain, by displacing the air already present, and then falling through the soil and running away in the drain, renews the supply of fresh air. In this way drains are of the greatest benefit. Drains actually diminish the loss of plant food by washing away. Stagnant water is injurious to the roots of plants. They will not grow in it. Draining removes this, and hence the plants send down their roots deeper. Consequently their capability of absorbing nourishment it greatly increased. It is this increased depth of the roots in well drained soil which render the crops growing on them less liable to suffer from drouth than those on imperfectly drained land.

Although rain, washing the surface and running off by open channels, may and does dissolve and wash away a considerable quantity of nutritive matter, the water which sinks into the land carries these nutritive substances deeper down into the soil and deposits them in the lower portions where the roots of the plants are to be found, and where these roots can seize and absorb these soluble matters. Draining causes the rain to pass through a considerable thickness of soil before it runs off, and hence it causes less loss of nutritive matter than is occasioned by rain washing soil as it does in undrained lands, carrying off to the streams and rivers much of the valuable nutritive matter that abounds on the surface.—*N. Y. Herald.*

HORTICULTURE.

AMERICAN PEACHES.

A London Horticultural journal had an article recently on American Horticulture, in which our country came in for a more than usual amount of praise. It has been so customary to read of our doings in such sneering terms, that it is refreshing to find a paper once in a while attempting to do us justice. When it came to our peaches however, it remarks, "as to American peaches, as we have them here in cans, the less said about their excellence the better." This seems to accord with the universal testimony of unprejudiced English gentlemen who visit our shores, who always contend that the peaches they get here are not equal in quality to what they get in their own country.—We have heard it objected that our peaches have to be gathered before they are quite ripe, in order to market well, and this may account for the somewhat inferior quality, but we have known these gentlemen taken to the best Maryland orchards, where they had the opportunity to select the best from the trees, and still their testimony was the same. Of course there are some who always from rule, decry everything they see out of their own country, and see nothing anywhere as good as in their own, but these are not the men we are writing about. The evidence seems to be that the best English peaches are better than our best, and it may be worth while to enquire why this is so, for surely our climate is more favorable to peach culture than the climate of England is.

In conversation with a very intelligent English gentleman recently, he explained that the peach trees are not grown in orchards as our trees are, but are trained like fans on the south or east side of walls with exceeding great care. Every weak or imperfect shoot is cut away, and only those allowed to remain that will produce the best fruit.—The walls are usually made of brick, and the branches all nailed perfectly straight and regular, by means of cast iron nails made especially for the purpose, and shreds of cloth obtained from tailors' refuse, which the garden boys cut up into pieces an inch or two long in wet days, for the purpose.—Every small or imperfect fruit is taken off as soon as it forms, and only the best left, and of these only enough for the ability of the tree to bring to first rate perfection.

Then the borders in which the peach trees are

grown are generally made for the purpose—the exact soil to suit being selected by the best skill that can be obtained, and attention given to underdraining and avoiding injuring the surface roots, after the trees have become well established. Expensive hand engines are kept, and about once a week powerful streams of water are directed against the trees, in order to keep down small insects that would otherwise prove destructive to the trees.—Hundreds of bottles with sweet liquid are hung about the walls, and the contents taken out every few days, these being winged insects which would prove very destructive to the tree or fruit. More than this, hundreds of yards of netting has to be stretched along over the walls to keep birds from the fruit—and generally heavy gates, like prison doors, have to be procured to keep out thieves of the human species, who otherwise would not leave one remain. This is the account as given to us, and from the character of our informant we believe it to be true, and if so the English deserve good peaches. Under such very careful treatment it would be a surprize if they were not superior, and the only surprize is perhaps, that under our own simple systems of culture the fruit are as good in comparison with the English as they are. The English fruit of course is costly. Our friend says they bring from five to six dollars a hundred at wholesale, and of course peaches are out of the reach of all but the wealthiest of the English people.

It may be worth our while however to consider whether we might not do more to improve the quality of our peaches. We believe that if some one who had the time to spare to try by this careful attention to have first class fruit, there would be people enough able to discriminate between a mean and a first class article to pay a price, that would be considered a handsome equivalent for the extra care taken.

NAMES UPON THE GATES.—It would be a great convenience if farmers generally would have their names painted upon the gates in front of their residences. Strangers often have much difficulty in finding persons of whom they are in search, which would be obviated by this course. Besides, a nice gate, with the name of the occupants, add greatly to the appearance of a place, and looks as though the inmates were not isolated from the outside world.

NOTES ON VARIETIES OF CABBAGE.

Last spring the writer received from the Agricultural Department at Washington a few varieties of cabbage seed to test. They were not sown till the end of April—too late to test them as early varieties, but a very good time to see what the later kinds would do. The varieties were Schweinfurth Quintal, Premium Flat Dutch, Early Tunnel, Late Flat Dutch, Late Montague Drumhead, Cocoanut, and McEwen.

The Early Tunnel did not attempt to head much. It made immense leaves, and after a short attempt at covering its caput, made a straight bolt upwards, and by this time they are all nearly in flower.—Quite likely if sown in fall or early spring, it might have some merit, as a late one it is of no account. The cocoanut is probably an early kind.—They headed very well but cracked towards fall. They make excellent eating, though the heads are somewhat small. The late Montague seems to be very late. Though all the rest have headed and many of them cracked, none of these have matured. The leaves have a very dark green and hardy appearance. At present however it is not probable they will reach the size or value of some of the others. It is quite likely however if sown early so as to give it time to head well, it might prove one of the most valuable of the lot. The Schweinfurth Quintal is one of the largest of the lot. The heads are of tremendous size, and when cooked are very tender and delicate. The color is of a lighter green than any of the others. Many of the heads have burst however, and it would have to be sown later than the others, to get from it the best success.—The late Flat Dutch is in the same condition.—Many of these are cracked open also, though in other respects the same excellences are apparent. The best for general purposes of a late cabbage crop we take to be the "Premium flat Dutch."—This we suppose to be an American variety. The leaves do not boil up quite so tender as some of the others. But none of the heads show any tendency to crack, and they come to an enormous size with considerable regularity, an important point in a good cropping variety.

One fact is evident from this trial, that the merits of a cabbage will depend in a great measure on the time of sowing. Had these been done a couple of weeks earlier or later, one report concerning them might have been very different.

Some people who neglected cultivating their orchards during the summer, now work in them, manuring and stirring the soil. This is wrong, as it starts the spring growth, which will of course, be cut by the frost.

COVERING STRAWBERRY BEDS.

In most gardens a practice has prevailed to cover strawberry beds with manure in the fall of the year. Unless this is wisely done it is worse than useless. We have known many strawberry beds to be entirely ruined by injudicious covering. Much of this injury has been done by injudicious writers, who tell what they think may be right, but which is quite as often wrong. A leading New York agricultural paper, for instance, told its readers as a lesson for garden work, how to *enocomize*, and one way was in taking up turnips, to use the leaves cut off from the roots for the covering of strawberries. It is highly probable that the writer never tried it. He felt he had a good thought, and he gave it for good practice. There is no plant suffers so much from damp as a strawberry, and to cover these plants with green leaves would be in most cases certain death to them. So leaves if they are likely to hold water or keep damp long, is destructive to the strawberry foliage—and barn yard manure, if it is what is known as fresh manure, is equally destructive. Indeed this is often worse than anything, for the strong substances in the manure act as a chemical destructive to the leaves in addition to the smotheration by confinement.

It is far better in most cases to leave the beds without any protection. Indeed in field culture no one ever thinks of covering. The plants are left to take their chance, and they generally do very well. Where the plants are likely to be drawn out somewhat by frost, a covering serves a good purpose, by preventing the freezing and thawing which generally follows where there is a warm sun in the day time on the unprotected soil, and frost at night. Another good point this covering secures is that the flowers are kept back a little, and thus the late spring frost which often takes off the early blossoms, finds no early blossoms to take.

Whenever for these reasons it is thought best to protect strawberries, good clean straw put very lightly on the plants is one of the best coverings. It must be thin enough to see the soil through it, for if thicker the moisture will gather under and rot the leaves. Wherever straw can be cheaply had it would probably pay the market grower to cover this lightly, more often than he does. It seems to preserve the leaves fresh and green through the winter, and it has been noticed that the greener and fresher these can be kept through the winter the better the crop will be.

Clover does well on a poor soil, if a good catch is secured and plaster used; but it does much better on a rich soil, paying well on the richest of land.

GRAPE VINE CUTTINGS.

It is a singular fact that cuttings of the grape vine—our native grape vine—taken off in the spring, often do not grow at all, or if they do grow, do not push as strongly as when taken off at this season of the year. Those who want to increase the grape, must therefore take the cuttings about the fall of the leaf, if they desire the best results. In making cuttings it is usual to make the lower end against an eye, for though roots come out from any part of a grape stem, they come more freely from an eye. The upper portion is cut just above an eye. If the joints are close together, the cuttings may be made of three buds or eyes. This will make them about 9 inches in length. If the joints are wide, as in some varieties they are, two eye cuttings will do. In planting them the cutting is inserted nearly its whole length in the ground, which keeps it moist until it sends out roots.

In those parts of our country where there is little frost we plant the cuttings at once where they are to grow, but in the others, where they would be drawn out by frost, they are tied in bundles, and mixed with earth or saw dust, and kept in cellars or sheds secure from frost, and not put out till the winter weather is past.

Where the variety is scarce, and as much is wanted of the kind as possible, grape vines are raised from single eyes. These are cut out of the canes so as to leave about an inch above and below the bud. It is difficult to raise grape vines this way in the open air, because of the liability of the little pieces to dry out when the hot spring weather comes, and before roots have pushed deep down into the soil; but those who have very sandy soil in which the buds may be put an inch beneath the surface, and yet push their way through without rotting, have had tolerable success. The method is chiefly in use by those who have forcing houses, and who can give them regular and daily attention. Those however who have not these houses can have fair success by using a common hot bed sash and frame. It is not essential to have hot bed manure. The sash may be set on the natural garden ground, and the eyes planted just beneath the surface in the natural soil. The frame is simply to keep the eyes from drying out. The eyes, like the cuttings, are cut up at this season, and are kept in moss, earth, or some similar material, till the proper time for planting arrives in spring.

You may manure wheat too much, the growth favoring the straw rather than the berry. When used, however, as a top dressing to start the crop, it answers an excellent purpose. Harrow the manure in when the seed is sown.

CHRYSANTHEMUMS.

In the paragraph on the last page of the *Farmer* for the last month, we inadvertently used the word "Chrysanthemums" for *Tuberoses*. *Tuberoses* and *gladiolus* should be taken up as soon as their leaves are dead, and preserved from frost, and not *Chrysanthemums*, which are hardy enough to bear any of our winters. But the mistake leads us to say a word about the chrysanthemum, which at this season, forms the great glory of our gardens.

The original introductions from China were of a pale blush and yellow, but the French and English florists took them in hand and improved them wonderfully in size, form and variations in color. Some twenty years ago, subsequent to the English treaty with China, an English gardener, Robert Fortune, was sent to China by the London Horticultural Society, and among his numerous collections he introduced to our knowledge the small button like flowered kinds, which have been known in gardens as Pompones. These also have been wonderfully improved since Mr. Fortune's original introductions.

In cultivation, there are many failures through growing them in ground too wet, or where they are too much exposed to winter's sun. They generally get killed out in such situations among shrubbery where the ground is a little dry, by the roots of the bushes, and where the branches make a little shade, and especially if the falling leaves of the shrubs are allowed to remain over them during winter, they always do well. Our old farmer wives, or rather the wives of those good farmers who are a little old-fashioned, usually plant them close up against the walls of the buildings, which seems to afford them the necessary dryness to get through the winter well. They flower in these situations beautifully, and are always a sight to see.

The culture is otherwise easy. They send up offsets in tolerable abundance, and if these old stocks are divided every spring, they will generally afford all one may need to keep up a stock for one's self, or to give to admiring friends. Some of the English catalogues have varieties up to a hundred or more. We should like to see them more generally grown here.


TOBACCO CONSUMPTION.—The tobacco statistics of the world could they be seen in one mass, would astonish the economists as well as the moralists.—France consumes annually 43,000,000 pounds of smoking tobacco, 8,000,000 pounds of cigars—say 850,000,000 in number; 17,000,000 pounds of snuff; 1,500,000 pounds of chewing tobacco, and 1,000,000 pounds of roll tobacco, which is either smoked, chewed or snuffed.

FUNGI AND FASHION.

Our readers can have no idea of the great fashion which has set in in England, in regard to the study of fungi. The scientific world have taken to them chiefly because they have been found so intimately connected with many of the theories of life. Microscopists find in them objects of the greatest beauty. Practical gardeners and farmers find them intimately connected with the diseases of plant life, and want to know all they can about them, and then there are the food economists, who find in them numerous species besides the common mushroom, that are inexpressively (so they say) good to eat. The toxicologists take to their study because there are so many of a deadly poisonous character, that they want to know all about, while there are so many of a charmingly beautiful character as to take the popular eye. The subjoined extract from an English paper will give some idea of the popularity of the fungus fashion:—

“The first Fungus Exhibition held in Scotland, was opened in Aberdeen on the 18th instant. The idea of the Exhibition was first suggested by the Rev. Mr. Ferguson of New Pittsligo, in the “*Scottish Naturalist*” for April. The suggestion was readily taken up by fungologists and men of science, and the result was an Exhibition which gentlemen entitled to speak with authority say was never equalled in this country. The specimens numbered about seven thousand. Almost every county in Scotland made large contributions, while England and Wales sent a number of exhibits.—In fact, almost every fungologist in Britain contributed specimens. A considerable proportion of the Fungi belonged to the larger classes, such as Agarici, Boleti, Polypori, &c.; but there were also large collections of microscopic Fungi, and very important additions to the British flora. Several species of Fungi new to science were exhibited, and some splendid specimens of Sparassis, which is very rare, were to be seen. Several fine specimens of *Fistulina hepatica*, *Polyporus sulphureus*, and *Phlebia radiata* were much admired. There was a specimen of *Helvella gigas* from Heathcot, near Aberdeen, a species only once before known to have been found in Britain. Among the edible Fungi was an enormous specimen of *Lycoperdon giganteum*, which had been gathered at Fetternear, in the north of Scotland, numerous specimens of *Cantharellus cibarius* and *Boletus edulis*. Several specimens of fossil Fungi, which are very rarely found, were exhibited. An excellent collection gathered on Moncreiff Hill, and sent by Sir Thomas Moncreiff, included a fine specimen of *Sparassis crispa*. Another prominent specimen of the same was included in a valuable collection from Huntly Lodge.”

France, it is said, imported \$60,000,000 worth of wheat last year. This year she will have \$20,000,000 worth to sell.

 New volume begins January 1875!

MUSHROOMS.

What can our gardeners be about that we are not better supplied with mushrooms? We see them occasionally at Cables and at Sutherland's, but at a cost of between seventy cents and one dollar a pound, and yet in the whole range of garden crops there is not one of easier cultivation or more certain product. To grow these fungi on a small scale for family use, procure two cart loads of good fresh stable manure and shake out the longest straw, then turn it over in the open air two or three times to get rid of the rank steam; when this is done take the dung into any shed or outhouse and mix with it thoroughly about four barrowfull of ordinary fresh soil. The bed is then to be made up on the floor of the shed or room to a depth of about twelve inches pressed rather firmly and spawned when at a temperature of between 75° and 80°.—A covering of about one inch of good strong loam in rather a rough state is then added and beaten level with a spade. By using heavy loam as a covering, the mushrooms produced are of a much more solid character than where light sifted soil is used; they are consequently more valuable, commanding a much higher price in the market. The whole is then covered up with at least nine inches of straw or long litter.

Here, in a nutshell, is the whole secret of growing this most delicious of esculents. We know a lady near Baltimore, who, by the above process, not only supplied her own table with mushrooms, but had enough to spare to bring her the snug sum of fifteen hundred dollars.—*Turf, Field and Farm*.

The above we take from the *Turf, Field and Farm*, as recognised by us to have been written by our old friend the epicurean, COL. F. G. SKINNER, the Field editor of that valuable journal. He knows, if anybody else does, what is good to eat. It exactly chimes in with our favorite theory, that there are many small industries that would make fortunes, if strictly and energetically pursued by the tender, the old and the feeble members of a rural homestead, who are incapable of hard work. We learn that a chief requirement in mushroom production is to have the beds in a dark place.—Even total darkness is best. They are very saleable and always command a good price. A small bed properly arranged would support a medium sized family. We saw them selling last month for sixty cents per pound in Baltimore markets. The person who was selling them told us, she made from a bed 6 by 10 as much money as a half acre would bring in almost any sort of vegetable, except celery.

It is held that stirring the soil favors moisture, and hence is good in a drouth. Crops have been nearly doubled in this way. But its not the moisture alone that does this; it is the increased fertility as well, which the stirring of the soil favors—a double benefit.

For the Maryland Farmer :

FARMERS AND FRUIT GROWERS.

The producers, in the Potomac region, together with many citizens of Washington and Alexandria, enjoyed a grand festival and fair, on Saturday the 26th of September.

On that day the Farmers and Fruit Growers, of Maryland, Virginia, and District of Columbia, united in an excursion and fair, down the river, at Mount Vernon Springs, and assembled in a fine grove and fields on the farm of Dr. E. P. Howland.

For this purpose the new and elegant steamer, "Mary Washington," was chartered; and she carried from six to seven hundred people, taken on from both banks of the Potomac, while nearly half that number assembled by teams at the grounds, making in all about 1,000 people, who participated.

The exhibition, for a mere excursion picnic, was considered very fine, and a perfect success.

The display of fruits, flowers, vegetables, grains, stock, poultry, dairy products, and products of the household, was varied and satisfactory. Also a good show of farming implements was on hand from the dealers of Alexandria and Washington.

It was not so much for a competitive fair, as for a re-union of the products of the Potomac region that this affair was gotten up, and to afford a pleasant holiday season for their families, as well as themselves; and it was admitted on all hands to be a happy success.

The finest show of grapes was from Prince Georges, Md. by Mr. H. T. Scott. The cabins and the sides of the boat were handsomely festooned with grape vines, of several varieties, bearing their luscious clusters of grapes, furnished from the vineyard of Col. Edward Daniels, of Virginia.

By noon the woods about the springs were thronged by picnic groups. At 2 o'clock Chalkley Gillingham, the President, called the meeting to order, and Col. Daniels was called for and made a brilliant speech on the finances of the country, and transportation matters; and he said that farmers must study and interest themselves in these affairs, as well as in the business of production, and look after the legislation, too. He said the popular idea has been that the farmer is mainly concerned in production, but the problem now is to obtain a fair equivalent for what he produces. The transportation of his products enters largely into this problem. On the fertile fields of the West even the producer barely wins a living. Cheap transportation is needed to increase his gains, so as to make farming pay; but cheap transportation can only be achieved by cheap and abundant money; so finance becomes a matter of command-

ing importance to the farmer. Indeed, the great question to-day is how to get money that can be loaned to the people at low rates and on long time. The farmer cannot use money that has to be paid back in thirty or ninety-days. He cannot afford to borrow at twelve or fifteen per cent. per annum; but give him money at six per cent. on a year's time, and the farm lands of Maryland and Virginia would be covered with manure which would return a rich profit to the grower. Our farmer of to-day must broaden his vision to take in the whole circle of his relations to home manufactures as well as his own immediate calling. Other gentlemen made brief and pertinent remarks.

The award for the best show of pears was given to Hilman Troth. The best for vegetables was given to Samuel Pulman. The best for wheat to C. Ballenger. For best milch cows to Shepard Wright—many other awards were made to others for various products, as well as for domestic fabrics; and for farming implements exhibited by different dealers.

This is the second joint exhibition of the Potomac Fruit growers, and the Woodlawn Farmers Club—which it is designed shall be a permanent annual enterprise. Altogether this excursion was a most profitable affair, long to be remembered with pleasure by all who participated, and with no regrets save for the absent ones. These reunions of the producers and citizens are eminently beneficial, bringing them together pleasantly for social acquaintance and a harmonizing of efforts and interests for the common welfare, by making all better acquainted with each other and with their mutual wants and interests, and it is hoped more of Maryland producers will take part in fairs.

LAND MARK.

FLEECES.—J. S. Goe, of Brownsville, Pa., sent the *Country Gentleman*, a report of the fleeces shorn from his flock of Merino sheep during the last week in May. One ram is said to have yielded a fleece of 35 lbs. 1 oz.—how much of it *wool*, we are not told—and six other rams and ram lambs, fleeces running from 21 lbs. 6½ oz., down to 15 lbs. 13 oz.—the average being a fraction short of 21 lbs. each on seven. The weights of 31 fleeces from ewes two years old and over, are given—3 of them over 20 lbs., 13 from 18½ to 20 lbs., and the remainder from 17 lbs. 1 oz., down to 14 lbs. 5 oz.—the average on the 31 being 17 lbs. 10 oz. nearly. Of the ewe lambs, 7 fleeces exceeded 14 lbs., and averaged 15 lbs. 9 oz.

California has the big corn-stalk—twenty-two feet high, and bearing five good ears,

POTOMAC FRUIT GROWERS.

OCTOBER SESSION.

This was more than a usually interesting meeting, the attendance was full, and the discussions instructive. Chalkly Gillingham, President in the chair, and D. S. Curtiss, Secretary.

Some beautiful pears—the Merrium and Dutchess—were exhibited by the President; and handsome apples—large pipins—by Stacy Snowden, of Fairfax county.

The early bearing of young apple trees was discussed. Mr. Pierson inquired how early it would do to let them bear; and the President answered, as early as they will; but thin out, and not let them bear too heavily.

In answer to the suggestion, that early bearing stunted the trees—Mr. Saunders thought that the young trees being first stunted was what made them bear so early. He said early-stunted plants always bear flowers and fruits earlier than thrifty-growing ones, it is the tendency of plants for stunted and diseased ones to fruit prematurely. He alluded to the old authors who knew and stated this fact—Darwin among them. He said there was nothing new under the sun, yes, there was one thing new under the sun; that was holding a horticultural show on a steamboat, as that lately gotten up on the Mary Washington, of which the Woodlawn Club might justly be proud. In this connection he commended the remarks of Col. Daniels, in which he said farmers have need to study finance, markets, transportation, and other business; they know how to raise grain; and now what they want to know most, is how to market to best advantage and make their money out of it.

A pleasant debate was had on the useful information to be derived from reading the works and experiments of early authors, in regard to fruits and farming. Mr. Saunders and Dr. Snodgrass referred to the valuable instructions to be found in the books of a century ago—when great attention was given to it.

Col. Curtiss presented a statement from an early essay, by Dr. D. Blake, contained in a book printed in Cincinnati 40 years ago, for healing wounds and curing diseases of fruit and forest trees, by covering them with a cement of earth, lime, soap suds, and ashes; also, covering stumps of new-felled trees with the cement, from which new bark will be formed over the wounded parts, and new sprouts spring forth. It was invented many years ago in England by Forsyth. Dr. Blake said this process was a highly valuable one, as applying it to new stumps, decay was prevented, and new trees could be produced; he said the pruning and cutting should be done when the trees are in most vigorous growth, May and June being the best months for it.

Prof. Wm. Saunders said he was well acquainted with Forsyth's works, and that they contained useful information; and that he got much useful knowledge from reading many old works on farming and fruit growing. Bradley's old collection of facts was useful.

Dr. Snodgrass said that grape growing in this country did not early attract much attention.—Washington's correspondence about his estates and farming, contained nothing about grape growing.

The question whether the use of Paris green on potatoes communicates poison to the tubers was discussed, at some length.

Dr. Brainerd stated that while on a recent visit to Michigan he was informed of a prevailing epidemic in a region where Paris green had been freely used to destroy potato bugs, and it was suggested that the people were probably made sick by eating potatoes which had been so treated, as they imbibed the arsenite of copper of the Paris green—the disease was in the form of diarrhœa. The chemist of the Agricultural Department is investigating this matter, and will report fully.

Mr. B. Bryant asked if the potato bug itself was poisonous.

Dr. Brainerd said that in Ohio a child trod on and crushed a bug with the bare foot, and it was blistered and made very sore, supposed to be produced by the poison of the bug.

The proposition of Prince George's County (Md.) Society to donate grounds to the Potomac Fruit Growers for a fair, &c., was spoken of favorably, and the attention of the committee called to it.

Col. Curtiss made a statement explanatory of the proposition; also, of the previous proposition of Dr. Brainerd to donate fifty acres of good land for an industrial practical school to be built upon.

Dr. Howland called attention to the proposition by the business men of Alexandria and the farmers thereabouts to get up fine fair grounds for permanent exhibitions of such societies.

D. O. Munsen thought we should have permanent and more enlarged exhibitions.

Mr. Z. M. P. King gave notice that the Woodlawn Club would hold its next monthly meeting at Col. J. M. Lewis' farm, on the 31st of this month.

Col. Lewis then invited this society to join the meeting at his place on that occasion.

After talking over these matters the meeting adjourned till the first Tuesday in November, when the public are cordially invited to attend.

LAND MARK.

DOMESTIC LOVE.

But happy they! the happiest of their kind!
Whom gentle stars unite, and in one fate
Their hearts, their fortunes and their beings blend.
'Tis not the coarser tie of human laws,
Unnatural oft and foreign to the mind,
That binds their peace, but harmony itself,
Attuning all their passions into love,
When friendship full exerts her softest power,
Perfect esteem, enlivened by desire
Ineffable, and sympathy of soul;
Thought meeting thought, and preventing will,
With boundless confidence; for nought but love,
Can answer love, and render bliss secure.
O speak the joy, ye whom the sudden tear
Surprises often, while you look around
And nothing strikes your eye but sight of bliss;
All various nature pressing on the heart;
An elegant sufficiency, content,
Retirement, rural quiet, friendship looks,
Care and alternate labor, useful life,
Progressive virtue, and approving Heaven!

Wood contains a large percentage of potash, and some phosphate—hence a liberal dressing of wood ashes, alone or with manure is of great advantage, and if some bone dust or superphosphate of lime can be added all the better.

DISEASE DESTROYING TREES.

M. Gimbert, who has been long engaged in collecting evidence concerning the Australian tree *Eucalyptus globulus*, the growth of which is surprisingly rapid, attaining, besides gigantic dimensions, has addressed an interesting communication to the Academy of Science. This plant, it now appears possesses an extraordinary power of destroying miasmatic influence in fever stricken districts. It has the singular property of absorbing ten times its weight of water from the soil, and of emitting antiseptic camphorous effluvia. When sown in marshy ground it will dry up in a very short time. The English were the first to try it at the Cape, and within two or three years they completely changed the climatic condition of the unhealthy parts of the colony. A few years later its plantation was undertaken on a large scale in various parts of Algeria. At Pardock, twenty miles from Algiers, a farm situated on the banks of the Hamyze was noted for its extremely pestilential air. In the spring of 1867 about 13,000 of the eucalyptus were planted there. In July of the same year—the time when the fever season used to set in—not a single case occurred; yet the trees were not more than nine feet high. Since then complete immunity from fever has been maintained. In the neighborhood of Constantine the farm of Ben Machydlin was equally in bad repute. It was covered with marshes both in winter and summer. In five years the whole ground was dried up by 14,000 of these trees, and farmers and children enjoy excellent health. At the factory of the Glue de Constantine, in three years a plantation of eucalyptus has transformed twelve acres of marshy soil into a magnificent park, whence fever has completely disappeared. In the Island of Cuba this and all other paludal diseases are fast disappearing from all the unhealthy districts where this tree has been introduced. A station-house at one of the ends of a railway-viaduct in the department of the Var was so pestilential that the officials could not be kept there longer than a year. Forty of these trees were planted, and it is now as healthy as any other place on the line. We have no information as to whether this beneficent tree will grow in other than hot climates. We hope that experiments will be made to determine this point. It would be a good thing to introduce it on the West Coast of Africa.—*London Med. Times.*

PIG PENS at this season of the year must be kept clean and supplied with plenty of dry litter. Give pure water to drink and salt the food a little occasionally.

Wheat Raising in Harford County, Maryland.

At the August meeting of the Deer Creek Farmers' Club, held at the residence of Thos. A. Hays, and reported in the *Aegis*, the subject for discussion was the best method of raising a wheat crop.

Mr. Hays thought the first thing to be taken into consideration to ensure a crop of wheat was the location, he preferring a northern exposure—should use plenty of bone; sows about the middle of September.

Mr. Glesgow prefers a clover sod; sows from the 15th to 20th September: always drills.

Mr. Gorrell finds his crops of all kinds best on rolling grounds—this year best on southeasterly exposure.

Mr. Willis had no experience in raising good crops of wheat, but plenty in raising poor ones.

Mr. Ball never very successful; two years ago he raised about five bushels off of ten acres. This year much better.

Mr. S. M. Lee plows clover under in July or August, when the clover heads are fully ripe; sows bone immediately after ploughing, so as to get the benefit of the warm weather; sows bearded wheat, never sowed any smooth wheat that succeeded but the White Blue Stem, and that for a short time only; favors drilling. Crop should be sown not later than middle of September, on account of timothy taking better when sown early.

Mr. Archer thought the clover tops were not essential for a crop of wheat; the principal thing is the roots; may as well mow the tops off.

Mr. Moores thought it was not necessary to sow the bone directly after plowing. His wheat was best where he sowed bone latest, excepting one part of the field that he grubbed—raised forty bushels per acre without any fertilizer. Messrs. S. M. Lee and Moores said any amount of bone without vegetable matter would not make a crop of wheat.

Mr. Silver prefers the ground to be left somewhat cloddy, the clods seem to feed the roots in the spring, as they crumble down from the action of the frost.

Mr. Ridout last year sowed his corn ground in wheat, on part of which he put bone, at the rate of 300 lbs.; could not see much difference where the bone was and where it was not. Grass did not take anywhere.

Mr. Archer had a beautiful set of timothy where he sowed immediately behind the drill, but on part of the field where he did not sow till one day after the wheat was drilled he had a poor set, owing, he thinks, to a heavy dew which fell during the night.

TETHERING CATTLE.—W. J. Hester, of McLean county, Ill., gives the following as the best plan for tethering cows, which he has proved to his own satisfaction:

I use a one-inch strap passed twice round, just above the ankle, and through a light iron ring.—To the ring I fasten half inch rope and avoid all danger of tangling, which sometimes result in broken necks when cows are fastened by the head. Should prefer to have five to six feet of trace chain close behind the foot where the rope sustains the most wear.

THE
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A STANDARD MAGAZINE

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Proprietor.

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Correspondent and Agent.

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Dr. E. J. Henkle,
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D. Lawrence,

John Carroll Walsh.
John Lee Carroll,
Augustus L. Taveau.
John Feast,
John Wilkinson,
John F. Wolfinger,
C. K. Thomas,

New Volume for 1875.

We would remind our old friends and patrons of the fact that with the next number (December) closes the 11th volume of the *Maryland Farmer*.—We will not be charged with self laudation when we express the belief that we have given the full value for the small amount expended, and hope our friends will promptly renew, and in the next two months make an effort to aid us in doubling our already large subscription list.

The subscription price is only \$1.50—clubs of 5 copies, or more, \$1 each, and if sent in by January 1st next, will pre-pay the postage.

CULTIVATION OF HEMP.

A correspondent writes from Shrewsbury, West Va., as follows:

"I am anxious to learn the "modus operandi" in all its several branches of hemp culture, from the sowing of the seed to the marketing, and request that you or some of your correspondents will favor me with the desired information through the columns of the *Farmer*."

Not having had any practical experience in the culture of hemp, ourselves, we hope some of our readers, who have, will give us the information desired by our correspondent. In the meantime we shall collate all we can from authorities and enquiries at the earliest day, upon the culture of this limited but important industry.

First Meeting of the State Road Committee.

CLARKSVILLE, MD. Oct. 13th, 1874.

To the Editors of the *Maryland Farmer*.

As the next regular monthly and also the annual meeting (for election of officers, &c.) of the Maryland State Agricultural and Mechanical Association will be held Thursday, November 5th, at 7:30 P. M., at its Rooms, corner Fayette and Eutaw Sts., it has been deemed advisable to hold first the session of the Road Committee (appointed by the State Society May 7th,) on the same day, same place, 12 M., to give members from a distance an opportunity to attend all the meetings: believing you take sufficient interest in this important question to publish above, I am, very truly, yours,

DAWSON LAWRENCE, Ch'm.

The Committee consist of the following gentlemen:—D. Lawrence, Ch'm, E. J. Hall, Dr. M. Merryman, Gen. George H. Steuart, Dr. W. S. McPherson.

T. L. PAYNE, Esq., associate editor of that excellent agricultural monthly, the *Southern Planter and Farmer*, Richmond, Va., and an old friend, recently made us a visit, he being on a flying trip northward. We are at all times glad to see his cheerful face and wish him great success with his *Southern Planter and Farmer*, which is really deserving of the patronage of the agricultural public not only of Virginia, but throughout the country.

WE OFFER to all who *renew* their subscriptions, and all *new* subscribers received before the *First of January* 1875, in addition to pre-paying the postage, a copy of PROF. WILKINSON'S "*Illustrated Essay on Dairy Rooms and Dairy Farming* : Supplemented by a chapter of *Useful Maxims and Safe Counsel*—also a description of Wilkinson's latest improvement in dairies, The Gulf Stream Refrigerated Dairy."

THE NEW POSTAGE LAW.

The New Postal Law, which goes into effect on the first of January next, makes it obligatory upon publishers to *pre-pay* postage on all periodicals. Under the law we must pay at the rate of two cents per pound, which in the course of a year will amount to about 10 cents instead of 12 cents, as heretofore, for the *Maryland Farmer*.

To induce our friends to make prompt payment, we offer to *pre-pay* the postage on all *new* and all *old* subscribers who renew before the *First of January*, 1875.

It is hoped that every old subscriber will promptly renew, and aid us in increasing our circulation by sending us at least *one* new subscriber from his neighborhood, which will require but a small effort.

For the *Maryland Farmer*.

WILKINSON'S "WIND SCREEN."

To the Editors of the *Maryland Farmer*:

I learned of this entirely new article among farm implements, about the time the patent was issued, in June last.

I had never seen it tested, but knowing the practical character of the inventor and patentee, I had full confidence in its usefulness, and procured one and put it upon my Bickford and Huffman Grass Seed Sower, which I have attached to the "Wisner Dumping Horse Rake."

I have used it for sowing my timothy seed this fall, and the seed is now up, and although some of it was sown in a violent gale, I find it to be evenly sown, and the quantity on the ground is apparently the proper one. I consider the Wisner rake a very perfect machine, and with the seeding attachment and the Wind Screen, it is altogether an invaluable compound machine.

No farmer having use for it, would be without after he has once tested it.

I have no machine, or apparatus on the farm which I prize more highly than the Wind Screen. But for it, I could not have sown my grass seed at the time it was sown, and by getting it in just in the nick of time, the grass has had the full benefit of the fine rains and is getting a growth that will enable it to resist the destructive effects of frost on late sown, feeble grass plants.

Very respectfully,

WM. T. PAINTER,
Birmingham Township, Chester Co., Pa.

GAS LIME.—The People's Gas Company, of Baltimore, offer for sale a large quantity of Gas Lime for agricultural purposes, in this number of the *Farmer*.

The Allegany County Agricultural Fair.

The annual Fair of this Society held on their grounds, near Cumberland city, on the 20th of October last, was also one of great success. The weather being favorable the attendance was large, the display of horses, cattle, &c. good, the racing programme attractive, and altogether the officers were fully satisfied with the result of their labors. It is stated that the Short-horns, Devons, Alderneys and Grades were particularly fine.

GRAIN ABROAD.—Our last market reports, says the *Rural New Yorker*, from abroad, show that in England there has been a further decline in the price of wheat. But it seems to be the impression of millers that the bottom has been reached, as they are reported as buying liberally. Wheat is higher in France than England. Corn has advanced slightly in the English markets. Barley is firm and in some districts has advanced slightly for malting samples. In France, according to the *Patrie*, (a semi-official journal,) the crops of wheat, rye, barley and oats, prove to be a yield of 26 per cent. above the average. In Germany, although supplies in markets have been limited, there has been a strong downward tendency in prices. The reports from Portugal indicate very short crops of wheat, maize, beans, rye, and barley.

Our Receipt for Curing Meat.

To one gallon of water, take $1\frac{1}{2}$ lbs. of salt, $\frac{1}{2}$ lb. of sugar, $\frac{1}{2}$ oz. of saltpetre, $\frac{1}{2}$ oz. potash. In this ratio the pickle can be increased to any quantity desired. Let these be boiled together until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when cold, pour it over your beef or pork. The meat must be well-covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface-blood, &c., leaving the meat fresh and clean.—Some omit boiling the pickle, and find it to answer well, though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. If this receipt is strictly followed, it will require only a single trial to prove its superiority over the common way or most ways of putting down meat.—*Germantown Telegraph*.

PUMPKINS.—If you have more pumpkins than you can feed to advantage before cold weather sets in, put them in a cool, dry place, where the temperature will just keep them from freezing, and they will keep three months yet. They must not be piled on each other to any great extent.

MARYLAND AGRICULTURAL FAIR

SIXTH ANNUAL EXHIBITION.

The sixth annual Exhibition of the Maryland State Agricultural and Mechanical Association was inaugurated on the 8th of October, 1874, and continued for four days on the Pimlico grounds, near this city. The show this year was equal, if not superior to any heretofore held, and the collection in many of the departments an honor to our State. Nothing was left undone by the energetic officers, to make the show one that would commend it to the liberal support and patronage of the public, whilst the display of splendid cattle, horses, sheep, swine, poultry, agricultural implements and machinery, horticultural and floricultural productions were of the very finest character; the attendance was exceedingly slim, for a State Fair, and being held so near a city containing 300,000 inhabitants, but it was not from a want of proper appreciation on the part of our people that so few visited the grounds, as the want of convenient and cheap conveyance to and from the same, and unless greater facilities are offered in this respect, the Fair, so far as visitors are concerned, never will be a success, for one visit by public conveyance will so disgust the traveler that he will never attempt another.

The main feature of the third day of the Fair was the delivery of an able and instructive address by the orator of the day, the Hon. Allen G. Thurman, of Ohio.

The President, A. Bowie Davis, Esq., T. B. Dorsey, Secretary, and Richard F. Maynard, Chief Marshal, and other officers were indefatigable in their efforts to make everything a success.

We have only space to make the following brief notices of the several deposits, and add the list of premiums.

ALDERNEYS.—The Alderneys were very choice and numerous, among the depositors were Col. J. S. Jenkins, Wm. C. Wilson, John Ridgely, J. E. Phillips, Wm. H. Perot, Jos. H. Rieman, S. M. Shoemaker, E. F. Jenkins, Wm. T. Walters, Robert Moore, Clark & Jones, Wallace King, W. S. G. Baker, E. B. Tyler, and others. The herds of this breed were unsurpassed.

DEVONS.—These were represented by the fine herds of C. W. Burwell, of Howard county, and C. T. Cockey, of Baltimore county, Md.—they were all in excellent condition.

AYRSHIRES.—These made a fine show—T. S. Cooper, of Coopersburg, C. K. Harrison, and John O'Neill, were the only depositors,—they were beauties, and attracted much attention from lovers of

fine stock; there condition was fine, and evidenced careful and judicious rearing.

HEREFORDS.—John Merryman, Esq., was the only depositor of this breed, whose herd is one of the finest in the country. The head of the herd is Sir Richard 2d, who was bred in Herefordshire, England, and imported to this country by his owner. This is the only herd in this State.

HOLSTEIN CATTLE.—S. M. Shoemaker, Esq., exhibited his herd of this breed, consisting of a bull and three cows, all of which were imported by Mr. Shoemaker, and were the first specimens of this breed ever exhibited at our State Fair. In color and form, the Holstein resemble the Short-horns. They are remarkable for bone and size, and are said to be adapted for either dairy or beef.

CHANNEL ISLAND CATTLE.—The specimens offered of this breed were very choice. The depositors were C. G. Shipley, D. G. Stevens, and L. Mongar. C. G. Shipley, captured the herd premium of \$25.

SHORT HORNS.—This splendid breed were well represented by T. C. Cooper, of Coopersburg, Pa., and T. L. McKeen, Easton, Pa., who as it will be seen divided the premiums. These herds for purity of strain and splendid appearance cannot be excelled.

KERRY CATTLE.—Henry D. Farnandis, Esq., of Harford County, exhibited his recently imported trio of this breed, Cato, Dinah and Polly, and they are curiosities in the way of cattle. The Kerry is native of the North of Ireland, and found mostly on the mountains and rude parts of the country—they are small, light, active, hardy and yielding for their size, abundance of milk and of good quality, and easily fattened when required.

SHEEP.—This portion of the display though not large, was much admired, and in point of purity of strain and beauty has never been excelled. The imported Cotswold buck—longwool—C. J. B. Mitchell, took first premium. John Merryman's middle wool buck—Hampshire—also took first premium. There were a number of native sheep on deposit by C. J. B. Mitchell, James Padian, J. S. Jenkins, John Merryman, and S. K. Crosby, making up an attractive display.

SWINE.—The display in this department was not as large as at former Fairs, or as was expected. The Berkshires of Mr. Charles B. Moore, of Pa., attracted great attention, as also did his Gloucester and Yorkshire swine. The Chesters of George T. Page, and T. C. Slingluff were fine specimens of that popular breed.

POULTRY.—The display of chickens, turkeys, &c., was particularly fine and varied, embracing the choicest breeds, and occupying some 180 coops.—

A large number of pigeons were also exhibited, of great variety, most of them very rare and of brilliant plumage; there were in all some 70 coops.

AGRICULTURAL IMPLEMENTS AND MACHINERY.—The display in this department was much larger than for some years, embracing every conceivable labor-saving machine, from the tiny lawn mower to the ponderous thresher and separator, and reflected great credit on our mechanics. Every manufacturer in Baltimore was represented, also a number from Pennsylvania, Virginia, Ohio and New York. We have not space for details, but give names of the depositors: R. Sinclair & Co., Thos. Norris & Son, E. Whitman & Sons, John C. Durborow, H. P. Underhill, John M. Griffith, Lee & Brothers, Linton & Lamott, Joshua Thomas, Geo. Page & Co., Poole & Hunt, A. G. Mott, all of Baltimore. Minard Harder, of Cobleskill, New York, had on exhibition, and in operation, his Gold Medal Rail-way horse power, Thresher and Separator.

FLORAL HALL.—The exhibition in the hall was really attractive. Flowers and plants, fruits and vegetables were fine and in abundance; needle work, preserves, wines, cordials, pickles, bread, cake, butter, abounded. A number of carriages and buggies of superior workmanship and finish were exhibited—as also, sewing machines, model of drying machine, elegantly mounted harness, rustic furniture, &c. Wm. D. Brackenridge, of Govans-town, was Superintendent of this class, and evinced great skill in the arrangement.

HORSES.—The exhibition of horses was the finest ever made in this State, including imported, blooded, heavy and quick draft and for general utility. Among the noted horses were "The Colonel," imported by Slaughter Ficklin, Esq., of Charlottesville, Va., imported "Ismael Pacha" (Arabian) by Col. Jenifer; "North Lincoln," a monster of horse flesh, owned by Wm. Long, of Canada—he was imported in August, 1873—17 hands 3 inches high, immense bone and substance, and weighs 2,240 pounds. Robert Moore of Baltimore county, exhibited a fine filly of the Hambletonian stock. Wm. T. Walter's fine Percherons elicited universal admiration, consisting of one stallion and five mares. Jos. H. Rieman exhibited a fine imported mare which took first premium.—N. C. Search & Co., of this city exhibited in all five thoroughbred animals, all trotters. Among the depositors were J. Howard McHenry, George Brown, Joseph Donahue, Chas. E. Easter, R. J. Slater, A. J. Pritchard, Geo. B. Graham, John Merryman, W. F. Johnson, C. K. Harrison, S. T. Lea, and others.

THE TRIALS OF SPEED each day were of a very

exciting character, and good time was made, but the details of the same are too lengthy for our columns.

THE PLOWING MATCH.—The ground selected for the trial was in the rear of the Club House, each contestant had to plow a strip of 200 yards, and 20 feet wide. The prizes were a diploma to best plow; \$20 to best plowman—\$15 to second, and \$10 to the third. The entries and contestants were: Wm. Brown, Brown plow, Alpheus Dwyer, plowman—T. C. Hall, two-horse plow, John W. Iglehart, plowman—W. A. Bennett, Pittsburgh No. 10 iron plow, Elijah Luck, plowman—Gen. E. B. Tyler, Norris plow, Acme, Jacob Rich, plowman—John Greacen, Greacen's plow, James Chambers, plowman—C. K. Harrison, Canada plow, A. B. Jeffrey, plowman—H. B. Holten, Pittsburgh steel plow, Geo. Parish, plowman—S. W. Worthington, No. 10 right hand iron plow, Wesley Gough, plowman—J. C. Durborow, Ball's steel plow, S. Mathias, plowman. The Judges were John Stewart, of Harford county, Anthony M. Johnson, and M. W. Shipley, of Howard county, and John B. Pearce, of Baltimore county. After a warm contest it was with difficulty that the committee made the following awards:—To A. W. Bennett's Pittsburgh No. 10 iron plow, exhibited by John M. Griffith, they award the Diploma. To best plowman, \$20, to A. Dwyer—2d best, \$15, to Elijah Luck—3d best, \$10, to John Chambers.

AWARD OF PREMIUMS.

CATTLE.

Short Horn Herd.—Thomas L. McKeen, \$25.

Devon Herd.—C. T. Cockey, \$25.

Hereford Herd.—John Merryman, \$25.

Ayrshire.—C. K. Harrison, \$25.

Jersey Herd.—Jos. H. Rieman, \$25.

Channel Island Herd.—C. G. Shipley, \$25.

Imported Ayrshire.—Best bull, three years, "Glen-loose," C. K. Harrison, \$25; second best bull, "Champion," T. S. Cooper, \$15; best calf, "Sancon Chief," T. S. Cooper, \$5; best cow, three years, "Rose of Sharon," T. S. Cooper, \$20; second best cow, three years, "Rose of Avon," T. S. Cooper, \$15; best heifer in milk, "Fannie," T. S. Cooper, \$15; best heifer calf, "Sancon Lady," T. S. Cooper, \$10; best heifer between one and two years, "Gentle Spring," T. S. Cooper, \$10.

Imported Short Horns.—Best imported Bull "Prince Nicholas," T. L. McKeen, \$25; imported Cow, "Clara Barton," T. S. Cooper, \$20; second do. cow, "Duchess Lehigh," T. L. McKeen, \$15.

Imported Herefords.—Best bull, "Sir Richard," John Merryman, \$25; best cow, "Giantess," John Merryman, \$20; second best cow, "Princess Victoria," John Merryman, \$15.

Devons.—Best bull, "Riley," C. T. Cockey, \$25; second do., "G. T. Patterson," C. W. Burwell, \$15; best cow, three years, "Thrifty," C. W. Burwell, \$20; second best cow, "No. 1," C. T. Cockey, \$15; best heifer in milk, "No. 5," C. T. Cockey, \$15.

Short Horns.—Best bull, three years, "Duke of Harrison," T. S. Cooper, \$25; second best bull, three years, "Duke of Saltville," T. S. Cooper, \$15; best bull calf, "Star of Linden Grove," T. S. Cooper, \$5; best cow, three years, "Jubilee," T. L. McKeen, \$20; second best cow, three years, "Lady Lehigh," T. L. McKeen, \$15; second best heifer, between one and two years, "Cinderella," T. L. McKeen, \$10; second best heifer calf, "Duchess Lehigh," T. L. McKeen, \$5.

Jersey Herd Book (Imported).—Best bull, 3 years old, "Orange Peel," John Ridgely, \$25; best bull between 2 and 3 years, "Baltimore Boy," J. E. Phillips, \$15; best cow, 3 years and upwards, "Everdene," W. C. Wilson, \$20; second best cow 3 years and upwards, "Bismarck," J. S. Jenkins, \$15; best heifer, between 2 and 3 years, "Annie," J. E. Phillips, \$15; second best heifer, between 2 and 3 years, "Lady Oak," J. E. Phillips, \$10.

Jersey Herd Book.—Best bull, 3 years, "Fairfax," J. S. Jenkins, \$25; second best bull, 3 years, "Young Davy," J. H. Rieman, \$15; best bull, between 2 and 3 years, "Cyclops," S. M. Shoemaker, \$15; second best bull, between 2 and 3 years, "Majestic," E. F. Jenkins, \$10; best bull, between 1 and 2 years, "Davy Hampton," John Ridgely, \$10; second best bull, between 1 and 2 years, "Sir Walter," S. M. Shoemaker, \$5; best bull calf, "Uranus," Robert Moore, \$5; best cow, 3 years old, "Arletta," Joseph H. Rieman, \$20; second best cow, 3 years old, J. Ridgely of H., \$15; best heifer between 2 and 3 years, in calf or milk, "Leah," W. T. Walters, \$15; second best heifer, between 2 and 3 years, in calf or milk, "Ettie Bell," Clarke & Jones, \$10; best heifer calf, "Molly," Wallace King, \$10; best heifer, between 1 and 2 years, "Beulah," Clarke & Jones, \$10; second best heifer, between 1 and 2 years, "Blank," W. C. Wilson, \$5.

Channel Island and their Crosses.—Best bull, three years, "Wilson 24," C. G. Shipley, \$25; best bull between one and two years, "Old Defender," W. S. G. Baker, \$10; best bull calf, "Beauregard," C. G. Shipley, \$5; best cow, three years, "Buttercup," D. G. Stevens, \$20; second best cow, three years, "Jenny Lind," D. G. Stevens, \$15; second best heifer, between two and three years in milk or calf, "Ida May," C. G. Shipley, \$15; second best heifer, between two and three years old, in milk or calf, "Daisy," D. G. Stevens, \$10; best heifer calf, "Lilly," E. G. Shipley, \$10.

Herefords.—Best bull, between one and two years, "September," John Merryman, \$10; best bull calf, "Duke of Edinburgh," \$5; best cow, three years old, "Hattie," \$20; second best cow, three years old, "Jennie Clark," \$15; best heifer, between two and three years old, "Alice Maud," \$15; best heifer calf, "Lottie," \$10; best heifer, between one and two years, "Princess of Wales," \$10; second best heifer between 2 and 3 years, \$10—all to John Merryman.

Ayrshires.—Best bull, three years, "Frank," J. O'Neill, \$25; second best bull, three years, "Sandy," C. K. Harrison, \$15; third best bull between two and three years, "Bramcar," C. K. Harrison, \$15; best bull calf, "Kirkwood," \$5; best cow, three years, "Tibbie," C. K. Harrison, \$20; second best, three years, "Bessie Ball," C. K. Harrison, \$15; best heifer in milk, "Mrs. Cuthbert," C. K. Harrison, \$15; best heifer calf, "Miss Fleming," C. K. Harrison, \$10; best heifer between one and two years, "Bessie Ball," C. K. Harrison, \$10.

Grades or Natives.—Best cow, "Millie," John O'Neill, \$21; second cow, "Blossom," Mrs. I. Brown, \$15; best cow between two and three years, "Ilover," Mrs. I. Brown, \$10; second best cow, "Sudie," J. O'Neill, \$5; second best cow or heifer between one and two years, "Jennie," Mrs. I. Brown, \$10; second best cow or heifer, "Peerless," J. O'Neill, \$5.

Kerry Cattle.—The discretionary committee on cattle mention the Kerry cattle of Henry D. Farnandis, Esq., of Harford county, Md., as quite a curiosity and worthy of notice.

Working Oxen.—Best yoke, to A. W. Stabler, of Montgomery county, Md., \$50; second best yoke, to H. B. Holton, of Howard county, Md., \$30; third best yoke, to W. A. Bennett, of Baltimore county, Md., \$20.

HORSES.

Sweepstakes.—Best heavy draft, W. T. Walters, \$100. *Imported Horses*.—Best imported stallion, "Ismael Pacha," Col. Jenifer, diploma and \$30; best imported mare, J. H. Rieman, \$2; best heavy draft stallion, "The Colonel," S. W. Ficklin, of Charlottesville, Va., \$30.

Blooded Horses.—Best thoroughbred stallion, Business, Jos. Donahue, diploma and \$30; best thoroughbred mare, Austran, George Brown, \$2; second best thoroughbred mare, Persia, J. H. McHenry, \$15; best horse colt, three years old, Paladin, George Brown, \$20; second best horse colt three years old, Culpeper, Jos. Donahue, \$15; first best two-year filly, Daisy, Colonel Jenifer, \$15.

Quick Draft Horses.—Best stallion, Lexington, Jas. Murphy, diploma and \$30; second best stallion, Gen. Jackson, Foutz & Long, diploma and \$20; best mare,

Mabel, George B. Graham, \$25; second best mare Nettie Lee, S. T. Lee, \$15; best three-year old horse colt, Robert Welsh, Charles J. Moore, \$20; second best three-year old horse colt, Gray Colt, G. H. Elder, \$10; best two-year old horse colt, Glamorgan, Chas. F. Easter, \$15; second best two-year old horse colt, British Chief, S. B. Cooper, \$10; best one-year old horse colt, Trustee, Robert Moore, \$10; second best one-year old horse colt, Rockland, W. F. Johnson, \$5; best three-year old filly, Crepidia, C. K. Harrison, \$20; second best three-year old filly, Lilly, Robert Moore, \$15; best two-year old filly, Saieda Bashaw, Joseph H. Rieman, \$10; best one-year old filly, Laura, John Merryman, \$5; best pair mares raised by exhibitor, Medora and Flirt, by M. B. Johnson, diploma and \$40; best brood mare with foal, Jennie Davidson, W. F. Johnson, \$2; best gelding, Carrollton, R. J. Slater, \$10.

Heavy Draft Horses.—Best mare, W. C. Wilson, \$25; second best mare, W. T. Walters, \$15; best horse colt, 1 year, S. M. Shoemaker, \$10; best pair of fillies, 3 years, C. K. Harrison, \$20; best filly, 2 years, W. C. Wilson, \$10; second best filly, 2 years, C. K. Harrison, \$5; best filly, 1 year, Wallace King, \$5; best team, not less than 4, W. T. Walters, \$30.

Horses for General Utility.—Best stallion, R. B. Hedricks, diploma and \$30; second best stallion, L. Mongar, \$20; best brood mare, J. Merryman, \$25; second best brood mare, T. C. Blair, \$15; best pair match coach horses, M. Moses, \$30; second best pair match coach horses, L. Mongar, \$20; best pair match coach horses raised by exhibitor, C. T. Cockey, \$30; best saddle horse, T. C. Blair, \$20; second best saddle horse, L. Hunt, \$15; best saddle pony, S. M. Shoemaker, Jr., \$10; second best saddle pony, D. S. Gittings, \$5. *Jacks, Jennets, &c.*—Best pair mules, Samuel W. Worthington, \$25; best team mules, Samuel W. Worthington, \$30.

SHEEP AND SWINE.

Imported Sheep.—Best long wool buck (Cotswold), C. J. B. Mitchell, \$20; best middle wool buck (Hampshire), John Merryman, \$20.

American Sheep.—Best long wool buck, C. J. B. Mitchell, \$20; second best long wool buck, C. J. B. Mitchell, \$10; best pen of ewes, C. J. B. Mitchell, \$15; best middle wool buck, James Padian, \$25; second best middle wool buck, J. S. Jenkins, \$10; best pen of ewes, J. S. Jenkins, \$10; best pen of ewe lambs, John Merryman, \$10; best fine wool buck, S. K. Crosby, \$20; best pen of ewes, S. K. Crosby, \$10; best pen of buck lambs, S. K. Crosby, \$10.

Swine.—Best Chester boar, George T. Page, 12; best Berkshire boar, Charles B. Moore, \$12; best Chester sow, T. C. Slingluff, \$12; best Berkshire sow, Charles B. Moore, \$12; best litter of Chester pigs, T. C. Slingluff, \$8; best Yorkshire sow, Charles B. Moore, \$12; best Essex boar, W. G. H. Stump, \$8.

POULTRY.

Best collection, W. Bowman, 20; second best, D. G. Stevens, 10.

Asiatics.—First premium dark Brama, Charles Boileau, 2; second do. do., D. G. Stevens & Co., 1; first premium dark Brahma chicks, Charles Boileau, 2; second do. do., James McDonnell, 1; first premium light Brahma, J. S. Bowen, 2; second do. do., Wm. Bordan, 1; first premium light Brahma chicks, J. S. Bowen, 2; second do. do., Charles Boileau, 1; first premium partridge Cochins, Wm. Bordan, 2; second do. do., T. B. Cooper, 1; first premium partridge Cochins chicks, Wm. Bordan, 2; second do. do., J. P. Shriver, 1; first premium buff Cochins, Wm. Bordan, 2; second do. do., Chas. Boileau, 1; first premium buff Cochins chicks, Chas. Boileau, 2; second do. do., John M. Griffith, 1; second premium white Cochins, Wm. Bordan, 1; second premium white Cochins chicks, Wm. Bordan, 1; first premium gray Dorkings, L. Mongar, 2; first premium white-faced Spanish, Wm. Bordan, 2; second premium Leghorn, Wm. Bordan, 1; first premium Leghorn chicks, Wm. Bordan, 2; first premium brown Leghorn chicks, D. G. Stevens & Co., 2; first do. Dominique chicks, Charles Boileau, 2; first premium black Hamburgs, D. G. Stevens & Co., 2; first premium black Hamburg chickens, D. G. Stevens, 2; first premium B. B. R. game, W. B. Cochran, 2; second do. game, J. A. Stuart, 1; first premium game chickens, W. B. Cochran, 2; second do. game chickens, J. E. Stuart, 1; first premium brown B. R. game chickens, J. E. Stuart, 2; second do. B. R. game chickens, T. C. Sling-

luff, 1; first premium muff chickens, T. C. Slingluff, 2; first premium Tarters do., T. C. Slingluff, 2; first premium Irish do., John E. Steward, 2; first premium blue do., J. C. Slingluff, 2; second do do do., J. E. Stuart, 1; first premium black grey do., T. C. Slingluff, 2; first premium pale do., T. C. Slingluff, 2; first premium duck-winged do., W. B. Cochran, 2; first premium Dominique do., John Mcerryman, 2.

Polish.—First prize, white Polands, Wm. Bowman, 2; first prize, white Polands, chicks, Wm. Bowman, 2; first prize, golden white Polands, chicks, T. C. Slingluff, 2.

French.—First prize, Houdans, D. G. Stevens, 2; second prize, Houdans, W. Bowman, 1; first prize, Houdan, chick, D. G. Stevens, 2; second prize, Houdan chick, H. P. Jordan, 1.

Bantams.—First premium, B. B. R. G. bantams, William Bowman, 2; second do do do, D. G. Stevens, 1; first premium, B. B. R. G. chickens, William Bowman, 2; second do do do, D. G. Stevens, 1; first premium, S. L. S. bantams, D. G. Stevens, 2; first premium feathered bantams, Frank Brady, 2; first premium, feathered bantam chicks, Frank Brady, 2; best collection of bantams, D. G. Stevens, 5.

Turkeys.—First prize, bronze turkeys, J. P. Shriner, 2. **Geese.**—First China geese, L. Mongar, 2; first African geese, H. Davis, 2; second African geese, H. Davis, 1.

Ducks.—First premium Rouen ducks, W. B. Cochran, 2; second premium Rouen ducks, F. W. Thomas, 1; first premium Rouen ducklings, D. J. Stevens, 2; second premium Rouen ducklings, Hubbell & Dunnett, 1; first premium Aylesbury ducks, C. H. Betts, 2; premium Aylesbury ducklings, T. C. Slingluff, 2; first premium Cayuga ducklings, T. C. Slingluff, 2; first premium Brazilian ducks, R. F. Maynard, 2; first premium Musk ducks, J. P. Shriner, 2; second premium Musk ducks, L. Mongar, 1; first premium Musk ducklings, J. P. Shriner, 2; second premium Musk ducklings, J. E. Phillips, 1; first premium Topnot ducks, J. E. Phillips, 2; first premium Topnot ducklings, J. E. Phillips, 1.

Pigeons.—Best collection, D. G. Stevens & Co, 5; second prize pair pouters, white, D. G. Stevens & Co, 1; first do do, swallows, William B. Cochran, 2; first do do almond tumblers, cock, D. G. Stevens & Co, 2; second do do, almond tumblers, cock, William B. Cochran, 1; first do do barbs, white, D. G. Stevens & Co, 2; second do do barbs, black, D. G. Stevens & Co, 1; first do do owls, powdered blue, William B. Cochran, 2; second do do owls, blue, D. G. Stevens & Co, 1; first do do fantails, blue, William B. Cochran, 2; second do do fantails, white, William B. Cochran, 1; first do do turbits, yellow, D. G. Stevens & Co, 2; second do do turbits, black, William B. Cochran, 1; first do do nuns, D. G. Stevens & Co, 2; first do do jacobins, white, D. G. Stevens & Co, 2; second do do jacobins, yellow, D. G. Stevens & Co, 1; first do do quakers, black, D. G. Stevens, 2.

Miscellaneous Class.—First premium, best incubator, E. G. Oakford, 3; artificial mother, E. G. Oakford, 3; first premium, live capons, J. P. Shriner, 3; first premium, dozen hen eggs, Miss Jennie Walters, 3; second premium, dozen hen eggs, D. C. Gray, 2.

IMPLEMENTS.

Imp'ements. Best threshing machine, six to ten horses, Geisler separator, by Linton & Lamott, \$10; best threshing machine, two to six horses, Geisler separator, by Linton & Lamott, \$20; best threshing machine without separator, E. Whitman, \$10; best straw carrier (Geisler), Linton & Lamott, \$5; best horse-power, four to six horses, Linton & Lamott, \$10; best one-horse railway power, Minard Harder, \$5; best two-horse railway power, Wheeler, Mellick & Co, \$10; best two-horse mowing machine, (Champion), L. H. Lee & Brother, \$15; best one-horse mowing machine, A. G. Mott, \$5; best horse lawn mower, E. Whitman & Sons, \$5; best hand lawn mower (Philadelphia), J. C. Durborrow, \$5; best combined reaper and mower, (Champion) L. H. Lee & Bro, \$10; best combined dropper attachment mower, L. H. Lee & Brother, \$20; best combined self-raking mower, (W. A. Woods & Co), T. Norris & Son, \$20; best sulky or wheel horserake, J. M. Griffith, \$5; best grain fan, E. Whitman & Sons, \$10; best cockle machine, E. Whitman & Sons, \$5; best corn-sheller, horse-power, R. Sinclair & Co, \$5; best corn-sheller, double spout, R. Sinclair & Co, \$4; best corn-sheller, single spout, R. Sinclair & Co, \$3; hay, straw and stalk cutter, horse-power, R. Sinclair & Co, \$8; hay, straw and stalk cutter, hand or horse-power, R. Sinclair & Co, \$8; hay and straw cutter, hand power, R. Sinclair &

Co., \$5; vegetable root cutter, T. Norris & Son, \$2; horse hay fork, T. Norris & Son, \$5; four grain cradles, E. Whitman & Son, \$3; half dozen hand hay rakes, A. G. Mott, \$3; half dozen garden rakes, A. G. Mott, \$2; half dozen pitchforks, A. G. Mott, \$2; half dozen forks for digging, A. G. Mott, \$2; half dozen long-handled shovels, A. G. Mott, \$2; briar and bramble scythes, A. G. Mott, \$1; hay press, horse power, E. Whitman & Sons, \$8; large cider and wine press, T. Norris & Son, \$8; small cider and wine press, H. P. Underhill, \$5; smut machine, Joshua Thomas, \$3; churn, Thomas Norris & Son, \$3; beehive, H. Everding, \$4; ox yoke and bows, J. M. Griffith, \$2; wagon brake, E. Whitman & Sons, \$2; farm gate, A. H. Kroat \$3; reaper knife grinder, A. G. Mott, \$3; stonebraker, R. Sinclair & Co, \$10.

Best one-horse plow for general use "Acme," Thos. Norris & Son, diploma and \$4; best two-horse plow for general use "Wiley," A. G. Mott, diploma and \$6; best three-horse plow for general use "Hall & Spear," John M. Griffith, diploma and \$6; plow for new and rough land "Minor & Horton," R. Sinclair & Co, \$4; subsoil plow, E. Whitman & Sons, \$5; hillside plow, John M. Griffith, \$5; gang plow, R. Sinclair & Co, \$4; sulky or wheel plow, Thomas Norris & Son, \$5; one-horse plow, vegetable, Thomas Norris & Son, \$2; hand plow, A. G. Mott, \$2; potato plow or digger, R. Sinclair & Co, \$5; harrow, John Kelsey, \$5; corn cultivator, R. L. Harvey, \$3; tobacco cultivator, E. Whitman & Sons, \$3; horse hoe, R. Sinclair & Co, \$3; vegetable hand cultivator, J. M. Griffith, \$2; field roller, R. Sinclair & Co, \$3; grain drill, "Bickford & Hoffman," H. P. Underhill, \$8; grain drill with guano and seed attachment "Hagerstown," John M. Griffith, \$15; corn planter for horse power, R. Sinclair & Co, \$5; corn planter for hand power, R. Sinclair & Co, \$2; garden seed sower, E. Whitman, \$2; best grain fan, E. Whitman & Sons, \$10; best cockle machine, E. Whitman & Sons, \$5; best corn sheller, horse-power, R. Sinclair & Co, \$5; double-spout corn sheller, R. Sinclair & Co, \$4; single-spout do., R. Sinclair & Co, \$3; hay, straw and stalk-cutter horse-power, R. Sinclair & Co, \$8; hay and straw cutter, hand or horse-power, R. Sinclair & Co, \$8; hay and straw cutter hand power, R. Sinclair & Co, \$5; vegetable root-cutter, T. Norris & Son, \$2; horse hayfork, T. Norris & Son, \$5; four grain cradles, E. Whitman & Sons, \$3; four grain and grass scythes, E. Whitman & Sons, \$3; one-half dozen hand hay rakes, A. G. Mott, \$3; one-half dozen garden rakes, A. G. Mott, \$2; one-half dozen pitchforks, A. G. Mott, \$2; one-half dozen forks for digging, A. G. Mott, \$2; one-half dozen long-handled shovels, A. G. Mott, \$2; briar or bramble scythes, A. G. Mott, \$1.

Best portable engine J. Thomas \$40; best sawmill, G. Page & Son \$25; agricultural steamer, R. Sinclair & Co, \$10; corn and cob mill, E. Whitman & Son \$5; farm pump hand power, T. Norris & Son \$3; sewing machine name "F. Sutton" diploma and \$10; best water ram, Hubbell & Dunnett, \$10.

The Committee on Implements commend Messrs. Poole & Hunt for their display of engines, mills, &c. Their engines not being mounted were not considered strictly portable but the committee take great pleasure in commending their excellent work and the compactness of their machines. The Committee on Implements also make honorable mention of sawmill with engine complete of George Page & Co, and take pleasure in commending the excellent work done by this engine, and also the quality of the workmanship.

Miscellaneous Implements.—Best sausage chopper, J. C. Durborrow, 5; Leffell turbine water wheel, Poole & Hunt, 10; pulleys, hangers, &c do dipoma; harrow and scraper combined, J. Ke'sey, 5; fruit and vegetable dryer, A. W. Sweeney diploma, corn husker, Wyderman & Goodwin, 3; fire extinguisher, C. T. Holoway, 1; one set horse shoes, O. H. Hicks & Co, dipoma, patent lamps, Shriver & Co, diploma, rye thrasher, Whee er M. & Co, 10; post hole digger, 1; cultivator, Thos. Norris & Son, 2; patent rat-trap, Norris & Son diploma; Babcock fire extinguisher do improved, F. W. Fager dipoma; belis, J. Register dipoma; tobacco ridger, J. Durborrow, 2; windmill, L. Morrison & Co, dipoma; farm wagon, Whitman & Sons, 15.

Grain and Root Crops.—Best sample of wheat, C. C. Carman, \$5; best white corn Mrs. G. S. Brown, \$5; best yellow corn, Mrs. G. S. Brown, \$5; best rye, Mrs. G. S. Brown, \$5; best oats, J. H. Riemann, \$5; best Irish potatoes, J. O'Neill, \$5; best sweet potatoes, C. C. Carman, \$5; best mangel wurzel, J. H. Riemann, \$5.

Garden Vegetables.—Best assortment, J. H. McHenry, \$15; best twelve long blood beets C. C. Carman, \$3; best twelve turnip beets John Richmond, \$3; best six heads cauliflower J. H. McHenry \$3; best six heads broccoli do. \$3; best six heads cabbages, do. \$3; best twenty-four carrots John Richmond \$3; best twenty-five parsnips George S. Brown \$3; best six egg plants, C. K. Harrison \$3; best peck onions J. O'Neil \$3; best three pumpkins C. C. Carman, \$3; second best do. J. H. McHenry \$3; best sample winter squash, C. C. Carman \$3; best peck tomatoes, do., \$3; best dozen roots, celery, T. C. Slingluff 3.

Fruit's.—Best collection of fruit A. W. Sweeney 15; second best collection fruit T. C. Slingluff, 0; best six varieties of winter apples A. W. Sweeney 2; best and largest collection apples A. W. Sweeney 5; second best and largest collection apples T. C. Slingluff, 2; best six varieties fall pears T. C. Slingluff, 4; best four varieties winter pears A. W. Sweeney 4; best and largest collection pears T. C. Slingluff 6; second best and largest collection pears, A. W. Sweeney 4; best and largest collection grapes C. J. Baker, 5; second best and largest collection grapes Mrs. G. S. Brown, 1.50; second best and largest collection of grapes, 1.50 J. S. Gittings; best seedling apples A. W. Sweeney 5.

Butter and Cheese.—Best pound of butter, made by exhibitor Mrs. Jenifer 5; second best pound of butter, made by exhibitor Mrs. James Constantine 3; best cream cheese Miss Bracke ridge, 2.

Bacon Hams.—Best ham, Mrs. Jenifer, 10; second best ham, C. C. Carman, 5.

Plants in Flower.—Largest collection, James Pentland, 10; second largest collection, John Feast 5; best nurseryman's collection of roses James Pentland 5; best collection of geraniums James Pentland, 4; best collection of verbenas James Pentland 4; second best collection of verbenas Miss M. Morling 2; best and largest collection of foliage plants James Pentland, 10; second best collection of foliage plants, John Feast, 5.

Evergreens.—Best and largest collection W. D. Brackenridge 10; second best collection Jno. Feast 5.

Cut Flowers.—Best collection, Miss Brackenridge, 5; best collection dahlias Arch Brackenridge 5; second best collection dahlias James Pentland 3; best collection of roses James Pentland 5; second best collection of roses Mrs. Pritchard, 3; best basket of flowers Miss Brackenridge 5; second best basket of flowers Mrs. Pritchard 3; best vase with flowers Miss Brackenridge, 5; best pair round hand bouquet A. Brackenridge 3; best round bridal bouquet Jas Pentland 4; second best round bridal bouquet, A. Brackenridge, 2.

Maryland Wine and Cordials.—Best wine Mrs. Jenifer 5; best bottle peach cordial Mrs. Jenifer 3; best bottle bounce Miss O'Moore 3; best bottle blackberry wine Mrs. Jenifer, 3; best bottle currant wine, Miss O'Moore, 3; best half dozen bottles cider J. H. Rieman, 6.

Canned Fruits, Vegetables, &c.—Best dozen canned fresh peaches in syrup Miss Bracken ridge, 10; second do. do. Mrs. A. Frazier, 5; best dozen cans of tomatoes Miss Brackenridge 6; best dozen jars of jellies Mrs. A. Frazier 5.

Domestic and Household Manufactures.—Best patchwork quilt Mrs. Yearly diploma and 4; second best patchwork quilt Mrs. J. L. Gore diploma and 2; best patchwork calico quilt, Mrs. Matthews, diploma and 3; second best patchwork calico quilt Mrs. W. Jones diploma and 1.50; best knit counterpane Miss K. Cloman diploma and 3; second best knit counterpane, Miss A. Gilpin diploma and 1.50; best homemade rug Mrs. Maynard diploma and 3; best homemade shirt, Miss Hooper diploma and 2; best coarse cotton knit hoes, Mrs. M. Myer diploma and 1; best worsted afghan, Mrs. L. A. Dallett diploma and 2; best specimen worsted work, Miss L. Yearley diploma and 2; best pair worked slippers Mrs. Granger diploma and 1; best piece of embroidery, Mrs. McDonald diploma and 2; best fruit of wax, Miss E. Burns diploma and 3; best homemade scap, Mrs. L. L. Willis diploma and 1; best homemade bread, Mrs. Pritchard diploma and 2; best homemade pound cake, Miss B. Jenifer diploma and 2; best sponge cake, Miss M. Jenifer, 2; best preserves, Mrs. Jenifer diploma and 1; best fruit jelly, Miss Brackenridge diploma and 1; best apple butter, Mrs. Rupert diploma and 1.

Household Discretionary.—Best oil painting, Miss M.

A. Curley, 1; best do. Miss Mary Davis, 1; best do. Miss A. Cockey, 1; best do. Miss Edith Cockey, 1; best do. W. M. Wood, U. S. N., diploma, worsted picture, Miss A. Harrison, 1; bristol board do. Miss E. Pritchard, 1; improved tan sheepskins J. W. Whitesides diploma, rustic furniture, Cotter and Brion, diploma, horse shoes, J. K. Anderson, diploma safety lamps, Shriver Co., diploma, Drexels cologne, Drexel, diploma ammoniated bone, Joshua Horner, diploma.

Harford County Agricultural Fair.

A Grand Success.

The true and energetic men of old Harford, after overcoming the many obstacles and difficulties which always present themselves in the perfecting of all enterprises, inaugurated the First Annual Fair of that county, on October 14th, which continued four days, and which was a decided and triumphant success. The institution of county agricultural Societies and Fairs, and the hearty spirit in which these exhibitions have been welcomed, are to our minds, the best auguries of the future prosperity of our people. In our State the great excellence of the recent expositions, and the earnest co-operation of our farmers, stock breeders, and manufacturers of labor saving implements and machinery, are deserving of the highest praise. The wealth of our counties as displayed in the superiority of their blooded stock, in their fine herds of choice cattle, in their grades, and in the productions of the soil, have never been excelled, to say nothing of the innumerable little industries which are thereby fostered. We hail the manifest interest which has been awakened in the encouragement of Agricultural Fairs as a good omen—for, rightly conducted, they can be made the means of diffusing such information as the farmer most needs, and if combined with Farmer's Clubs and the interchange of experiences, must, before many years, prove of incalculable benefit, not only to our farmers but to our entire people. Being fully impressed with the great benefits which would flow from the organization of a county Society and Fair, the enterprising farmers of Harford determined upon the effort, the result of which has proven so satisfactory.

The unparalleled success which has attended this first exhibition is a matter of congratulation to all, and gives assurance that the *second* will far out-rival the first, not only in the display, but also in the attendance, and will tend to develop the agricultural capacities of old Harford.

The entire Fair week was blessed with the most charming October weather, and from early morning to noon, the avenues leading to the Grounds were literally thronged with vehicles of every description, and pedestrians, many coming from the remotest portions of the county, and indeed many from the adjoining counties and Baltimore city.

The grounds selected and purchased for the purpose are located on the Baltimore Pike, within half mile from the Court House, and embrace about 22 acres of land. The grounds are enclosed with a substantial fence, with a business office on the pike, a capacious exhibition hall, a grand stand, convenient pens for stock, a well made track for trials of speed, nearly circular in form, and one-half mile in length, and all this accomplished in the brief period of a few weeks. We have not the space to enumerate the many meritorious deposits, but can-

not refrain alluding briefly to some of the most notable features of the exhibition.

In the cattle department was the fine herd of Alderneys of Edward F. Jenkins, of Baltimore county, for which he received first premium. The magnificent Alderney Bull "Joe Willetts," and Bull calf "Harford," of H. D. Farnandis, as also his three black Kerrys, Cato, Dinah and Polly—the same exhibited at the State Fair—elicited universal admiration. Ramsay McHenry's Alderney cow and heifer, and Herman Stump's young bull were fine specimens. This breed was also represented by Col. E. H. Webster, Wm. H. Dallam, Wm. P. Trimble, Geo. H. Williams, R. W. Holland, Mrs. A. M. Bond, and Garret Amos.

In the Devon class was the fine herd of Geo. R. Glasgow; bull and heifer of J. A. Shriver; cow of H. S. Gorrell; and steers of E. S. Rogers and Wm. D. Lee. The Short Horns were not numerous, but J. C. Thompson's cow, and F. Stump's bull, cow and heifer were worthy representatives of this kingly race—Jas. R. Whiteford's steers were noble animals. The Holstein bull of J. Parry & Bro., was alone in that breed. There was a fine array of grade and native cattle, and among the depositors were Wm. Munnikuyzen, R. H. Archer, Jas. Lee, John A. Streett, Thos. A. Hays, S. B. Silver and Stevenson Archer. John Streett offered a fine herd of mixed breed. The fat cattle—2 steers—of J. W. Galbreath—and working oxen of E. S. Rogers, R. H. Archer, Jas. R. Whiteford, Wm. D. Lee, H. S. Gorrell and Joshua Rutledge, gave evidence of judicious rearing.

The Sheep display was particularly large and fine, consisting of Southdowns, Cotswolds and Grades. We have seen no better pens of Swine for a long time, embracing Chesters, Berkshires, Essex and Grades, and reflected great credit on their breeders.

The display of Horses was one of the most attractive features of the Fair, comprising blooded, saddle, quick and heavy draft, general utility, &c. Among the notables were Hambletonian, by Dr. J. H. Cochran; "Hanover," by E. S. Rogers; "Fanchon," by John R. Streett; "Legatee," by Dr. John Frederick; pair Patrick Henry colts, by James Lee, and a host of very valuable horses, mares and colts, all Harford bred. The daily Trials of Speed gave satisfactory evidence of training.

The Household department was fairly represented, consisting of the handiwork of the wives and daughters of Harford.

The vegetables and fruits made a highly creditable show; S. N. Hyde, of Boothby Hill bore off the palm for best raised vegetables, among which were White Peach Blows, Early Vermont and Comptons' Surprise potatoes, fine tomatoes, lima beans, cabbage, &c. H. D. Farnandis also made a fine display of vegetables, consisting of 5 or 6 varieties of potatoes, sugar beets, rutabagas, turnips, &c. The collection of apples was very superior, embracing almost every variety. Col. Webster exhibited a superior sample of oats.

A prominent feature of the Fair on Friday was the Tournament. At the sound of the bugle, and under the marshalship of the gallant Gen. James Mahool, the squadron of knights were presented at the Grand Stand, when Col. Edwin H. Webster, in the absence of John V. L. Findlay, Esq., Orator, delivered an inspiring charge to the Knights, at

the conclusion of which all seemed animated with the true knightly spirit, and at command of the Herald, and with lance in rest, assumed their several positions for combat.

The assembling of the contestants in their gorgeous uniforms, the noble bearing of the proud horses, the throngs of fair ladies and brave men, the fine music from the Band, the bright and genial sun, all conspired to make it a scene not soon to be forgotten. The riding did the heroes great credit, and the number of rings lanced spoke well for the skill of the knightly company. After a warm contest the result showed that Elias J. Pearce, of Baltimore county, took the largest number of rings, and consequently the prize—a handsome saddle and bridle—and the still greater honor of naming the Queen of Love and Beauty, and choose Miss Sue Hutchins, of Harford. Mr. Caleb Wright, of Baltimore county, named Miss Millie Ford as First Maid of Honor; A. Frank Gladden, of Harford, named Miss Katie Street, as Second Maid of Honor, and Joshua S. Burke, named Miss Sallie Scarff, as Third Maid of Honor. These young ladies seemed to bear their honors with queenly modesty. The selections made by the winning Knights were then escorted to the Herald's Stand, when, after an appropriate address by the Hon. Henry D. Farnandis, he presented and crowned the Queen and her Maids with the beautiful wreaths prepared for the occasion.

PLOWING MATCH.

The Committee on Plowing, as to the quality of work done, reported that the Iron Centre Plow, exhibited by Jno. M. Griffith, was entitled to the 1st prem., \$5; also that the Hillside Plow, exhibited by the same gentleman, was entitled to favorable consideration.

On Thursday the Hon. John Ritchie, of Frederick county, Orator of the day, delivered an address which was listened to throughout its delivery, with great interest by a large auditory. We may find an opportunity to publish the address in full in a future issue of the *Farmer*.

For kind attentions during our visit we are indebted to Henry D. Farnandis, Esq., and family, Hon. J. Carroll Walsh, Col. E. H. Webster, J. M. Streett, Secretary, Frederick W. Baker, Lingan Jarrett, and others.

The following is a list of officers of Harford county Society:—President, Harris Archer; vice-president, C. C. Kinsey; secretary, Jos. M. Street; treasurer, Wm. H. Watters; directors, Arthur Vosberry, Wm. R. Martin, Griffith Davis, Jas. Magaw, Andrew Boyle, J. Rush Street, James Amos, Wm. T. Sawyer, Garret Amos, C. C. Kinsey, and R. Harris Archer.

Among the visitors to the Fair, we noticed ex-mayor Robert T. Banks, Hon. Carroll Spence, Wm. Crawford, Edward Cochran, John Norris, Dr. Winchester, Levi Church, and others of Baltimore.

We make room for the following list of premiums, which will more fully indicate the character of the exhibition:

LIST OF PREMIUMS AWARDED.

Blooded Horses.—Best stallion, "Legatee," John Frederick, \$10; best mare, "Grace Rogers," E. S. Rogers, \$5.

Saddle Horses.—Best mare, "Fanchon," Jno. R. Streett, \$5.

Quick Draft Horses.—Best stallion, "Young Hambletonian," Dr. J. H. Cochran, \$8; best mare, "Lady Lightfoot," John R. Streett, \$5; second best bay horse, "Mountain Boy," B. & J. Standiford, \$3; best span horses, Richard M. Howard, \$10; best colt, 3 years old, James Lee, \$5; best colt, 2 years old Hamilton Easter, \$3.

Horses of General Utility.—Best stallion, "Tom Winans," Wm. Gladden, \$10. Best gelding, "Major," Howard Amos, \$5.

Heavy Draft Horses.—Best stallion, "Frank Norman," Mansel E. Morrison, \$10; best gelding, "Mike," 7 years, Emmor Morrison, \$5; best gray filly, 2 years, Garrett Amos, \$3; best colt, 1 yr. 2mo., A. T. Patterson, \$2.

Mule and Horse Teams.—Best span of mules, James Lee, \$5; best four-horse team, B. F. Ayers, \$10; best six-mule team, Joshua Rutledge, \$10.

Durham Cattle.—Best cow, "Rose Winans," J. Crawford Thompson, 10; best bull, "Brutus," Frederick Stump, 10; best heifer calf, Fr. Stump, 2.50; best twin steers, Jas. R. Whiteford, 10.

Devon Cattle.—Best pair steers, 2 yr. 6 mo., E. S. Rogers, 10; best bull, J. A. Shriver, 10; best heifer, 18 mo., J. A. Shriver, 5; best cow, 9 yrs., H. S. Gorrell, 10.

Alderney Cattle.—Best bull, 2 yr. 6 mo., H. D. Farnandis, 10; best cow, 4 yr., R. McHenry, 10; best bull, 18 mo., Herman Stump, Jr., 5; best cow, 18 mo., Ed. F. Jenkins, 5; best bull, 7 mo., Henry D. Farnandis, 2.50; best heifer, 9 mo., R. McHenry, 2.50.

Grade and Native Cattle.—Best cow, 5 yr. old, John A. Streett, 10; best bull, bet. 1 & 2 yrs. S. B. Silver, 5; best bull, under 1 yr., Thos. A. Hays, 2.50; best heifer, under 1 yr., John Streett, 2.50; best pair steers, R. Harris Archer, 10; best bull, "Pompey," John Streett, 5.

Fat Cattle.—Best steer, J. W. Galbreath, 10.

Working Oxen.—Best yoke oxen, H. S. Gorrell, 10; second best, R. Harris Archer, 5.

Herd Cattle.—Best herd Alderney cattle, Ed. F. Jenkins, Baltimore county, 10.

Cotswold Sheep.—Best buck, J. W. McGaw, 5.

Southdown.—Best ram, Wm. G. Scott, 5.00; second best, H. D. Farnandis, 5.50; best six ewes, H. D. Farnandis, 5; second best, H. D. Farnandis, 2.50.

Grade Sheep.—Best yearling buck, W. S. Whiteford, 5; best 6 ewes, Wm. Rodham, 5; second best 5 ewes, James W. McGaw, 2.50.

Chester Hogs.—Best 6 shoats, 8 mo., Ed. Preston, 5; best sow, 6 mo., J. G. Favour, 5; best boar, 1 yr., Garrett Amos, 5.

Berkshire Hogs.—Best boar, Wm. S. Whiteford, 5; best five pigs, 2 mo., H. C. Jenkins, 5; best sow, 18 mo., H. C. Jenkins, 5.

Essex Hogs.—Best boar, 2 yr. 6 mo., Wm. G. Scott, 5.

Grade Hogs.—Best boar, 11 mo., Jesse Hoskins, 5; best 5 pigs, 3½ mo., 5.

Berkshire sow and pigs. W. S. Whiteford, recommended to favorable consideration.

Poultry.—Best pair turkeys, T. B. Swartz, 2; second best, John Moores, 1; best domestic fowls, imported breed, T. K. Dannenberg, 2; second best, T. K. Dannenberg, 1; best common do., Wm. Scarff, 2; best ducks, Miss May Williams, 1; best display of poultry, E. Pearson Amos, 4; best game chickens, Miss May Williams, 1.

Discretionary Premiums.—Best pea fowl hen and 9 young, T. B. Swartz, "Maryland Farmer," best Lincolnshire buck, 16mo., T. B. Swartz, 1 share stock; best stallion, "Red Bird," Wm. Anderson, 1 share stock; best 2 sheafs oats, E. P. Amos, "Maryland Farmer," best 2 pens of hogs, D. C. Vanhorn, 1 share stock; best pair coon hounds, Wm. Scarff, "Maryland Farmer," best lot slate, Harford and Peach Bottom Slate Mining Co., diploma; best stallion, "Young Ajax," J. Bradenbaugh, \$10; best yearling filly, "Dolly," D. C. Vanhorn, 3; best mare, "Lady Bosley," Milton Bosley, 1; best trotting wagon, Spangler & Bro., York, Pa., 1 share stock; best coop of chickens, Miss Mary A. Bond.

Machinery and Implements.—Best reaper and mower, R. E. Morgan, agent, diploma; best mowing machine, No. 2, R. E. Morgan, agent, diploma; best Diamond State Horse Power and Casho threshing machine, Chas. L. Heck, 5; best straw and fodder cutter, A. J. Michener, 3; best rye thresher and shaker, A. J. Michener, diploma; best cider mill, J. T. Baldwin, diploma; best wheat fan, Samuel Keeler, 3; best washing machine, J. K. Hamilton, 1; best corn sheller, John M. Griffith, 2; best horse rake, A. J. Michener, 2; best 3-horse centre-draft plow, C. H. Stifler, 3; best 2-horse plow, Lambert Pennington, 2; best shovel plow, John M. Griffith, 1; best cultivator, John M. Griffith, 1; best 2-horse harrow, John M. Griffith, diploma; best hay press, David Reynolds, one share stock; best harpoon hay fork, John M. Griffith, diploma; best wagon hoister, Jos. B. Burkins, diploma; best display of agricultural implements, John M. Griffith, 10.

Vegetables.—Best Early Rose potatoes, W. Scott Whiteford, "Maryland Farmer," best Bromwell potatoes, H. F. Whiteford, "Maryland Farmer," best Peerless potatoes, B. C. W. Cunningham, "Maryland Farmer," best Excelsior potatoes, C. C. Kinsey, 1; best Prince Albert, potatoes, C. C. Kinsey, "Maryland Farmer," best White Peachblows, S. N. Hyde, "Maryland Farmer," best Early Vermont, S. N. Hyde, 1; best Compton Surprise, S. N. Hyde, 1; best garden turnip beet, J. H. Quinby, 1, best turnips, J. H. Quinby, "Maryland Farmer," best basket Lima beans, S. N. Hyde, 1; best basket wax beans, S. N. Hyde, 1; best pk. Late Rose potatoes, C. C. Kinsey, 1; best pk. orange carrots, Dr. R. Dickey, 1; best peck Belgian carrots, Wm. M. Edelin, Jr., 1; best peck stonemason cabbage, S. N. Hyde, 1; best pk. Trophy tomatoes, S. N. Hyde, 1; best half-dozen white carrots, Mrs. C. A. Rutledge, "Maryland Farmer," best peck white marrowfat beans, James W. McGaw, "Maryland Farmer," best two radishes, R. C. Lee, "Maryland Farmer," best half-peck onions, R. T. Bowne, 1; best peppers, Amos Hollingsworth, "Maryland Farmer," best rutabagas, H. D. Farnandis, "Maryland Farmer," best field pumpkin, S. H. Mitchell, 2; best egg plants, Jos. Parry & Bro., 1; best cauliflower, H. D. Farnandis, "Maryland Farmer," best two pumpkins, Jas. W. Hanna, "Maryland Farmer," best celery, H. D. Farnandis, 1; best 7 head cabbage, planted 4th July, John Armstrong, 1; best salsify, H. D. Farnandis, 1.

Culinary Department.—Best biscuit, Mrs. J. M. Streett, 2; best rusks, Mrs. Garrett Amos, 2; best sponge cake, Miss Mamie Amos, 2; best pound cake, Miss Martha J. Rutledge, 2; best display can-

ned fruit, Miss Annie E. Whiteford, 2; best jar preserves, Mrs. Laura J. Dickey, 2; best blackberry wine, Mrs. William H. Waters, 2; best catsup, Mrs. Hannah E. Pennington, 2; vinegar, R. T. Bowne, 2; best jelly, Mrs. Wm. H. Waters, 2.

Fruits.—Best pears, R. C. Lee, 1; best grapes, D. C. Vanhorn, 1; best apples, Miss May Williams, \$1.

Flowers.—Best window garden flowers, Mrs. R. T. Bowne, \$1.

Home-Made Fabrics.—Best rug, Mrs. Apphia Moores, 1; best calico quilt, Mrs. Wm. Young, 3; best specimen needlework, Miss Delia L. Archer, 2; best silk quilt, Mrs. Dallas Reeve, 3; best crochet work, Mrs. S. Archer, 1; best worsted work, Mrs. Thos. A. Hays, 1; best tettering Ettie H. Wilson, 1; best embroidery, Miss Virginia S. Mitchell, 1; best display of fancy work, Mrs. Fanny Chambers, 2; best sewing by hand, L. E. King, 2.

Dairy.—Best butter, Mrs. Thos. Butler, 2; second best, Mrs. Arch. Wilson, 1; best glass honey, John J. Dean, 2; second best, Wm. A. Heaps, 1.

Seed.—Best corn, Jesse Hoskins, 1; best oats, E. H. Webster, 1; best white wheat, Cheyney Hoskins, 1; best red wheat, R. E. Morgan, 1; best timothy seed, T. B. Swartz, 1.

Flour.—Best family flour, Chas. C. Parker, 2; second best, Frank Whitaker, 1.

Carriages.—Best family carriage, P. Palmer, York, Pa., 5; best top buggy, P. Palmer & Co., 2, best no-top buggy, Millard Hopkins, 2.

Saddle and Harness.—Best set single carriage harness, James A. Fulton, \$3 and diploma.

X Washington County Agricultural Fair.

This annual exhibition was held on the Society's grounds near Hagerstown, commencing October 14th, and continued four days. The exhibition in many respects was vastly superior to any previous show held by this society, for which the officers deserve great credit. The display was highly creditable, and the attendance large. The fine specimens of Durhams, Devons, Alderneys, Jerseys and grades, was all that could be expected. The exhibition of horses, light and heavy draft, consisting of stallions, mares and colts, there being over 200 head on the ground—was a decided success. The sheep, fine, long and middle wools, was of a superior character, and a decided feature. S. C. Weller, entered a pair of beautiful Cashmere goats, which attracted great attention. The Swine department comprised Chester whites, Poland, China and crosses. In Agricultural Implements and Machinery there was a fine display, reflecting credit upon the manufacturers, most whom were to the manor born. In the household department were every conceivable article, home manufactures of every variety, fancy work, hams, poultry, fruits, vegetables, flour, grain, grapes, vines, &c., altogether making up an attractive exhibition of which the ladies of the county might well be proud. Among the display of fruit Major M. J. Hale had 82 different varieties of apples. On the third day of the Fair the Hon. Alexander R. Boteler delivered the Annual Address which was replete with sound doctrine and wise suggestions. From all reports that have reached us, the members of the Washington County Society may well exult at the great success of their Fair for 1874.

Kent County Agricultural Association.

The Fourth Annual Exhibition of this Association opened Tuesday, September 29th, upon the grounds of the Society at Worton Station, near Chestertown, under very unfavorable circumstances.

A cold rain storm set in Monday evening which continued until Wednesday morning. The attendance on Tuesday, the first day, was very meager, and on account of the very unpropitious weather the entries of stock, articles, &c., very few. The trials of speed did not take place at all the first day.

The time for closing entries was extended to Wednesday, but the disappointment to many the day before deterred them from entering at all, and the display was considerably less than it would have been under other circumstances.

Nevertheless the stalls and pens for stock were well filled, and the large and spacious hall containing articles of domestic and household manufactures, fruit, flowers, &c., were well stocked in the different departments.

The attendance Wednesday was very good, and the success of the exhibition generally admitted. There were trials of speed during the afternoon, although the purses were not well filled.

The address of Hon. Barnes Compton, orator of the day, was delivered at 3 o'clock, P. M., and was an able and eloquent production.

The attendance Thursday and Friday was not as good as the day previous. No additional attractions except the trials of speed each afternoon.

Among the horses exhibited, the noble thoroughbred Stallion "Legatee," of Dr. E. A. Vannort, was the principal attraction. As was also the display of Legatee colts, as the Doctor had offered a liberal premium for the best colt by "Legatee." The Doctor had also on exhibition a very fine thoroughbred mare and colt.

Keystone Patchem, exhibited by W. A. Kennedy and a filly, by Samuel Vannort, deserve notice among the *quick draft* horses, also a mare by J. Cornelius, and a colt 2 years old, by John Brice, under head of *General utility*.

The sweepstake prize, for the best stallion, in any class, of whose get the greatest number of superior colts on exhibition was awarded to Dr. E. A. Vannort's thoroughbred stallion "Legatee."

J. S. Corden exhibited the best short horn cattle. Dr. Vannort the best Devons. Samuel Vannort the best Alderney cattle. W. H. Newman the best Herefords and John Brice the best native cattle.

Sheep, Hogs and Poultry were well represented, and among them many excellent specimens.

In fact every class was well filled and would have been crowded had not the inclement weather prevailed.

The whole affair was a success, and much credit is due the very efficient Executive Committee composed of the following gentlemen: Rob. Nicholson, chairman, Wm. W. Stephens, E. A. Vannort, M. D., Saml. Vannort, John Brice, Wm. H. Stewart, J. S. Skirvin, J. W. Corey and Jas. Brice.

LAMBS.—When the cold, chilly rains of autumn begin to fall, bring in your lambs and house them every night, and even in stormy days, feeding them liberally with clover or other fine hay, roots or grain. Never allow lambs to become stunted in growth for want of care and proper food.

For the Maryland Farmer.

The Semi-Centennial Fair of the Franklin Institute.

Agricultural and Mechanical Fairs.

I have just returned from a Fair tour. I spent several days at the Chester County, Pennsylvania Fair, one day at the Mt. Holly Fair, in Burlington County, N. J.—and a day at Franklin Institute in Philadelphia, which, compared with the rural Fairs above mentioned was like the meridian sun to dim stars. It excels all Mechanical Exhibitions that it has been my lot to witness and I have been in the habit of attending Mechanical Fairs nearly ever since they were first held by the Franklin and American Institutes. The space occupied by the Franklin Institute is said to be an area of two acres, and the space is so admirably economised and controlled by such judicious regulations that I am inclined to believe that the amount and variety on exhibition there, for the space occupied, has never been excelled at any display in the world.—Judging from what I observed whilst at the Franklin Institute Fair, and from reading the reports of it in the Franklin Institute—daily edition—of the "*Philadelphia Commercial and Manufacturers Gazette*," sent me, I have arrived at the conclusion, that in the detail of its management that Fair is equal, if not superior to any similar institution anywhere, at any time.

Many of the regulations there enforced would add greatly to the comfort and interest of both exhibitors and spectators, if they were introduced and rigidly enforced at the thousand and one Fairs now held in all parts of this vast country.

I have attended a number, where there was a great want of system, and a very apparent ignorance of many of the essential requisites that make such Fairs pleasant and profitable. Nothing, however, detracts so materially from the usefulness of Agricultural Exhibitions in their legitimate channels, as that of making trotting and racing the special feature, by devoting an amount of money to prizes for speed equal to, if not greater than that offered in any other branch, and in some instances, nearly equal to the aggregate of prizes offered in all other branches.

I had observed for years the ground taken on this subject, by some of the most solid and sound Journals in the country, that the track feature of Agricultural Show Grounds, was baneful in its influences to a lamentable degree; but I had not been an eye witness to its effect, until this Autumn, for several years. Having a full opportunity to observe the working of this, and all other features of two prominent Fairs, quite remote for each other, and one of them in a strictly rural district, I am forced to the conclusion, that the usefulness of these Fairs was seriously impaired by the horse racing and trotting feature. In both instances, the prizes offered for speed, far exceeded those offered in any other department, and I regret to say that the interest in the horse trots and mule races, by young and old of both sexes, and by black and white, was tenfold greater than in all else on exhibition.

I was an invited guest at both the Fairs to which I refer, hence had free access to all parts of the exhibition, but I did not in either case encourage the racing, or the cruel mule beating, by descending

so low as to ascend to the "*Grand Stands*," so called, to witness what I looked upon as actionable cruelty to animals.

I saw a half dozen or more work mules taken from the plow, or heavy wagons, and mounted by negroes, "bare-back," each armed with a club, or cudgel, and the poor stiff animals beaten around the track, and repeating.

Several of them fell, and one fell on the rider, and another rider was thrown over a fence, or railing, and was said to be seriously injured, yet nearly all seemed to enjoy it hugely; and that it was evidently considered the great attraction of the Fair, (so called) I would state that whilst this barbarous performance was progressing, fully seven-eighths of the perhaps 8,000 people on the grounds, were crowding pell mell all along the track, and not a seat was to be had (it was said) on the *Grand Stand*. I would not attempt to deny that tests of speed and endurance of our horses for various purposes, on the turf, has resulted in improving them greatly, and to an extent that could not have been attained, except through such tests: nor would I condemn trials of speed, or races, properly conducted; but I am sure that it is not compatible with the best interests of agricultural and the mechanical art, to make trials of speed collateral with the exhibition and tests of the productions of these preeminently useful arts. All who have witnessed the effect, must concur in the conclusion at which I have arrived, I think. Managers of Agricultural and Mechanical Fairs claim that they cannot be sustained without the track and its attractions.

This I shall not attempt to deny, for I have not seen a practical test of it, but I am confident that the appropriation of like sums to those devoted to purses and prizes for speed, offered for agricultural machinery, especially for new machines, so much needed, that will cut up corn in the field, and shuck it at less cost than the present processes, and many others equally needed will bring out such an array of these needed, useful machines, that it will both surprise and greatly benefit the farmer.

Horse race advocates, at fairs will, I am sure, contend that the money could not be raised to pay such prizes, in the branches that I have advocated, without a large entrance fee; this I believe, and I also believe, that if prizes, such as are offered for speed, were offered for implements, machines and vehicles, that competitors would gladly pay the entrance fee necessary to create the required prize money. These branches would thus be much better represented and withal self sustaining.

A few would bear away the well deserved prizes, the farming community would get the benefit of the ingenuity, skill and industry of the best mechanics in the land, who would be encouraged to try again, and perhaps in new fields and their unfortunate competitors, who have mistaken their calling, would be driven into their true sphere, where they may obtain a livelihood, and all will thus be benefited.

I perceive that the racing feature has been prohibited at several Agricultural Fairs, this year, so we shall ere long, know how it results. But I am satisfied that the highest success cannot be attained in discarding the horse attraction, unless similar prizes, with proper entrance fees are substituted in the legitimate branches to be fostered,

In conclusion, I would invite such as feel competent to prepare and publish a schedule by which to conduct an Agricultural and Mechanical Fair, with full details for every department. I believe that prizes offered for such schedules would be very useful and profitable.

No reform is needed in their management more than in instructing committees in their duties, especially Reception Committees, that *invited guests* may not be obliged to wait a half day outside of the gate, whilst one of the committee can be induced to leave the "grand stand" and mule race, to come and receive his guest.

Very respectfully,

J. WILKINSON.

FREDERICK COUNTY FAIR.

The 1874 exhibition of the Frederick County Agricultural Society gathered together a greater number of people than any other exhibition of the kind in the State, it being estimated that on the second day there were over 10,000 visitors on the ground. The weather during the Fair was of the most pleasant character, which induced so large an attendance, the ladies, especially, turning out in great strength, making a fine array of the beauty and loveliness of Frederick city and county, which was really the most attractive feature of this magnificent affair—so decided by Baltimore gallants, who are good judges in *that* class.

The entries of cattle, horses, sheep, swine, poultry, &c., were large and imposing, consisting of superior Durhams, Devons, Alderneys, Herefords, Ayrshires and Grades. The horses embraced blooded, quick and heavy draft horses and colts, numbering over 100. The sheep comprised South-downs, fine, long and mixed wool and fat sheep, and were in large numbers. The Poultry show was equal to anything of the kind ever exhibited at any county Fair.

The household and miscellaneous department was a grand success—the numerous evidences of the handiwork of the wives and daughters of Frederick called forth the universal expression of admiration at the skill and taste displayed, from every visitor. The Farm and Garden products exhibited was convincing proof of the progress made in the science of farming and the high culture of the garden.

The daily Trials of Speed attracted general interest, and the time made, satisfactory. The agricultural implement department was well represented by her own manufacturers, and many from abroad.

Gov. Bradford of Maryland, and Gov. Bigler of Pennsylvania, visited the Fair by invitation, as representatives of the Centennial Exposition of 1876, to be held in Philadelphia, both of whom made very interesting addresses on the purposes and objects of the same.

A number of prominent visitors from Baltimore and other places were present during the Fair, and were the recipients of Frederick hospitality.

As evidence of the grand success of the Fair of 1874, it is announced that the receipts at the gate reached the large amount of \$6,500.

CARROLL COUNTY CATTLE SHOW.

We visited the Carroll county Fair at Westminster, and were glad to see so many evidences of the prosperity of the Association. There was a large attendance.

The cattle were in full force, but we must say were not remarkable specimens of the different improved breeds. The mixed or common stock was fair. Show of sheep was very poor.

The hogs did great credit to the farmers of Carroll. It was a superior exhibition of Chester hogs, which seemed to be the popular bred in this entire section of the State.

The Horses were the chief stock attraction, and made a good exhibit.

In the Poultry department there were a fine pair of Bronze Turkeys, Dark Brahma and Black chickens.

In Horticulture, the vegetables were not remarkable, except three immense Hubbard Squash, each much larger than a half bushel measure, and some large Peerless potatoes. The yellow corn was good—in one ear we counted *thirty two* rows.

The display of fruits was very superior, and in great variety. The peaches and apples extra fine. The manner in which the fruit was arranged showed the different specimens to great advantage. A stand placed on a table in pyramidal shape, like narrow steps, and covered with muslin, on these steps each sort of fruit was marked with card, giving the name of the fruit and number of the exhibitor. The stand was about three feet high with a broad shelf on the top where grapes were placed in heaps on baskets and a beautiful collection of flowers was interspersed with fine effect. In the same way were the jellies, pickles, canned fruit, &c., exhibited, and in this line the ladies of Carroll made a display of domestic industry which did them great credit. This arrangement for fruit, flowers and household manufactures, is well worthy to be imitated by other associations which have horticultural exhibitions.

The outside shows, games of chance, flying horses, &c., were very many and seemed the chief attraction until the trials of speed begun. It was very manifest, that these things must be allowed, if a crowd is to be drawn together. Men and women whose religious views would not allow them to visit Race Courses, attend these trials of speed, with great pleasure and, look on, as they pass, at the games of chance, which abound on the grounds of modern Agricultural Fairs.

There was a fair display of machinery, among which the offerings of Messrs. P. E. Beckley & Co., of Reisterstown, were a prominent feature, especially the Whitman Whitewater Wagon. Also John A. Neel, at Reisterstown, Agent for the sale of the "Excelsior Walking Cultivator," made at Springfield, Ohio, with which we were very favorably impressed.

THE DAIRY.

LONG TABLE TALK ON DAIRY MATTERS.

TALK NO. X.

MILK.

Pure and impure: How can we tell the difference? First let us look at

THE CONSTITUENT PARTS OF MILK.

"The following are given as the constituent parts of milk and their characteristics:

The aroma, or odorous volatile principle which flies off when first drawn, in the form of a visible vapor. Water, which constitutes the greatest part of the milk, and which, with the sugar, forms serum or whey. Cream, which exists, in fresh-drawn milk, in the form of bland oil, but which by its lightness, rises to the surface on standing. Caseine, or cheese, which is separated in the coagulation of milk, and which is an animal gluten, resembling albumen in many respects. Sugar, which is obtained from the serum or whey, by evaporation, and which, in fresh-drawn milk, unites the cream and caseine with the water. Several neutral salts, the principal of which are phosphate of lime, and chloride of sodium or common salt."

Analysis of new country milk by Dr. Vœlcker: water, 87.40; pure butter, 3.43; caseine (curd) and a little albumen, 3.12; milk-sugar, 5.12; mineral matter (ash) .93. Total 100 parts. Per centage of dry matter 12.60.

This would be 1 pound of butter to about 29 pounds of milk: the range is from 15 to 35 pounds of milk to a pound of butter; milk varies in its constituent parts, and the hydrometer (water-measure) and cream ometer (cream-measure) have been used to determine whether milk has been watered.

The hydrometer indicates the specific gravity of a body: i. e. its weight compared with an equal bulk of water: the specific gravity of a cubic inch of platinum is 20: it is twenty times heavier than a cubic inch of water, and as all bodies as a rule have their specific gravity, the effort has been made to ascertain the specific gravity of milk: if this could be done and if it was invariable, one step could be taken towards laying down one rule for a test of pure milk.

Let us see what light the specific gravity bottle and the hydrometer throw on the relative weight of milk.

Dr. Fleischman made experiments in Bavaria on the milk of 13 dairies containing 123 cows.

The average specific gravity of the milk from the 123 cows was 1.031, (water at 1.000.)

The maximum was 1.034: the minimum was 1.029. From his experiments the Dr. inferred that no winter milk from a herd of cows will show below 1.030 or above 1.033, unless watered or skimmed: this is the test by the hydrometer.

Upon the other hand it is urged that instruments for testing the specific gravity are not accurate, that the composition of milk varies, and hence the variation in its specific gravity is so great that even with accurate instruments it is not a reliable test, and further, that one quart of water may be added to four of milk, and the mixture so manipulated by the addition of burnt sugar, carbonate of soda and salt, that the instrument would not indicate the fraud.

Dr. Hassall of London, says that cows milk has an average specific gravity of 1.030, but that the specific quantity of genuine cows milk varies, and gives a table of the specific quantity of the milk, skim milk and degrees of cream of 14 cows from which we take the following specimens:

Cows.	Milk. Sp. Gr.	Skim. Sp. Gr.	Cream. Deg.
No 1	.....1.031	.....	..... 2
3	.....1.019	.....1.027	.....26
4	.....1.018	.....1.026	.....80
10	.....1.024	.....1.028	.....10
12	.....1.023	.....1.030	.....25
13	.....1.024	.....1.031	.....32

The other 8 cows ranged from 1.025 to 1.030 in milk; from 1.028 to 1.031 in skim milk, and from 2½ to 13 degrees of cream.

(We are not clear in our conception of what is here meant by degrees of cream: if it was not for 80 degrees in number 4, we should take "degree" to mean percentage—so many parts in a hundred—according to the accepted American mode of calculating: the other figures are some of them high, but we have even a higher percentage than the highest (32) above given: the 2 degrees of number 1 is lower than any other cream percentage we ever heard of: the record of our own dairy in no case goes below 5, but 2 per cent. is possible: we have an analysis of sick cows milk which shows under 2 per cent. of butter: but the 80 degrees above cannot be per centage of cream as will be seen by tables we shall give below.) It may be a type error.

From this table it will be seen

1. That milk may be of heavy gravity and poor in cream (1):

2. Or light and rich cream (4): if this is not 80 our readers may calculate on a very high figure according to comments thereon:

3. And that the removal of the cream increases the (3, 4, 10, 12, 13,) specific gravity of the remainder several degrees.

We call attention to this last deduction: it is

generally supposed that light milk has been adulterated by water: in our recent trip north, a milkman in Brooklyn informed us with emphasis that "he expected his 10 gallon cans of milk from the country with which he supplied his city customers to weigh 110 to 120."

We replied that "with us in Maryland a gallon of milk was supposed to weigh a little over 8 lbs."

"If you should send me 8 pounds of milk," he returned, "I'd send it back to you." On this point: milk will weigh, it is on record, 8, 15, 100 pounds to the gallon: our own milk, pure, rich, fresh, yellow, morning milk, 2 hours from the cows weighs 8 pounds 14 oz. (8.9) to the gallon: happy ignorance of milkmen who sell, and city people who drink water at 10 cents a quart.

The milk of 42 cows ranged from a specific gra-

vity of 1.008 to 1.031, the serum (whey: what is left after removing casein, cheese and butter) ranges only from 1.025 to 1.028: the specific gravity of skim milk will average 1.035. "Hence pure whole milk has a less specific gravity than skim-milk, caused by the lightness of cream. If the cream be either in part or wholly removed from the milk, the residual milk will weigh more than when containing its cream, and would give higher specific gravity than pure milk as it averages; this might be, as it often has been done, adulterated by water, which is lighter than milk, to the density of pure milk, a fraud that can not be detected by a lactometer or hydrometer."

Again, as a further illustration of the variation in the quality of milk, we submit another table of the milk of 9 cows:

	1	2	3	4	5	6	7	8	9	11	12
Water.	85.26	85.86	85.6	87.0	92.4	86.7	92.3	87.7	86.9	49.0	49.4
Butter.	4.40	4.42	4.7	3.5	1.9	3.4	2.0	1.9	1.0	42.4	31.5
Sugar.	3.97	1.79	4.8	1.5	1.0	1.8	1.0	1.3	4.2	3.8	1.9
Casein.	5.71	7.08	4.3	6.8	3.6	6.9	3.7	7.4	4.4	4.2	16.5
Salts.	0.66	0.85	0.6	1.2	1.1	1.2	1.0	1.7	0.5	0.6	1.1

We will explain some of these variations: This information from another source fully corroborates our statements above in regard to the unreliability of hydrometer tests:

No. 1 was a sample from the milk of a single cow kept for family use, and is of course *milk*.

No. 2 was the mixed milk, from cows in a distillery dairy (swill fed.)

No. 3 is "country milk" as furnished to customers in the city.

No. 4 is a sample of milk from cows in a distillery stable.

No. 5 is No. 4 as is delivered to the customers in the city.

No. 6 is another sample of milk from distillery cows.

No. 7 is No. 6 as it is delivered to customers.

No. 8 is a sample of milk from a sick cow in a distillery stable.

No. 9 is a sample of milk as delivered to a "condensed milk factory."

No. 11 is the *cream* raised on No. 9 after standing thirty-six hours.

No. 12 is the *cream* from a sample of distillery milk standing at the same temperature during the same length of time.

Nos. 4 and 5 are essentially the same milk, or at least they ought to be, but are not. The increase of over *five per cent.* in water tells a tale of "doctored" milk which is rendered, and the more complicated by a decrease of over three per cent. in the proportion of casein.

Nos. 6 and 7 are also from the same source and

same milking, and in both cases a well mixed sample, yet between the milking and the custom, we find an increase of over five per cent. in the amount of water, with a decrease in the amount of casein, very nearly corresponding to No.'s 4 and 5. It is plain that No.'s 5 and 7 have not only been watered to the extent of over one quart in twenty, but worse than this they have both been "doctored" in some other way, so as to destroy the validity of lactometric tests.

We do not understand the high percentage of 11 in cream; No. 9 of which it gives the cream has 1 per cent. of butter, equal to say 4 pounds of cream or 4 per cent. of cream.

Further, we give below a table of the percentage of cream of the milk of 10 cows, showing the difference between the cows and also the first drawn milk and strippings.

Cows.	First Drawn Milk.	Last Drawn.
No 1	11 per cent. cream.	47 per cent.
2	9 "	48 "
3	7 "	33 "
4	8 "	33 "
5	5 "	35 "
6	11 "	45 "
7	7 "	29 "
8	6 "	33 "
9	5 "	65 "
10	10 "	39 "

From which it will be seen that tests sometimes accepted as conclusive are not accurate enough to detect adulteration, and that this must be practiced to a considerable extent to be detected by any means short of a rigid chemical analysis: we shall treat further on "milk" in our next. *

A Chat with the Ladies for NOVEMBER.

BY PATUXENT PLANTER.

"Oh, beautiful Indian Summer!
 Thou favorite child of the year,
 Thou darling, whom Nature enriches
 With gifts and adornments so dear—
 How fain would we linger
 On mountain and meadow awhile,
 For our hearts, like the sweet haunts of Nature,
 Rejoice and grow young in the smile.

Not alone to the sad fields of Autumn
 Dost thou a lost brightness restore,
 But though brightest a world-weary spirit
 Sweet dreams of its childhood once more;
 Thy loveliness fills us with memories
 Of all that was bright and best—
 Thy peace and serenity offer,
 A foretaste of heavenly rest."

NOVEMBER comes, and to make amends for those dark and dreary days, it seems fated to wait beneath, brings beautiful Indian Summer, to rejoice our hearts and gladden us into the delusion that it is the opening of spring and not the closing of autumn.

The mild, clear days should be embraced to finish planting out the bulbs, and tubers, and shrubbery, taking up, dividing and replanting the tuberous rooted plants, thinning out and separating such bulbs and shrubbery as are growing too thick, tying up the bushes, and protecting with long straw or fine evergreen boughs, by tying them around those plants likely to be winter killed by the sun. Most plants require mulching with a thick coat of coarse stable manure.

Prepare your hanging baskets for house adornment the coming winter. You cannot grow all kinds of plants in these baskets. There are two sorts that are best for this beautiful and tasty work: those which are low and compact in growth, so as to effectually cover the surface and those of drooping or trailing habit, to hang gracefully over the sides.

Mr. Henderson mentions, as most suitable for a basket one foot in diameter, the following plants: *Coleus Verschaffeltii*, a well known bronze-foliaged plant.

Centaurea candida, a plant with white, downy leaves, of compact growth.

Geranium, Tom. Thumb, scarlet, dwarf and compact, blooming all summer.

Sedum Sieboldii, a plant glaucous foliage and graceful habit.

These are suitable for the upper surface of the basket. Those proper to plant near the edge of the basket, to hang over the sides, are:

Lobelia Erinus Paxtoni, an exquisite blue, drooping 18 inches.

Lysimachia nummularia, flowers bright yellow, drooping 18 inches.

Linaria Cymbalaria, inconspicuous flowers but graceful foliage.

In preparing the hanging basket for the reception of the plants, the sides and bottom should first be lined with moss to hold the water and prevent the dirt's being washed through. Use the same soil as for potting plants, and give the plants plenty of sunshine and moisture.

Adorn your houses, and make home pleasant, to be remembered always by the sons and daughters; although remember as the poet sings:

Home's not merely four square walls,
 Though with pictures hung and gilded,
 Home is where affection calls,
 Filled with shrines the heart hath builded.

Now that your preserving and pickling, and canning of fruits and vegetables is done with, let me urge you to put up a large supply of apple butter, it saves cow butter, and the children prefer it to molasses or honey. It is very wholesome, so is peach, and pears, and quince butter, the last is delicious. Now is the very time to make a large quantity of apple butter.

The dairy will command all your energies, as it is the closing up of butter making, except by heat. Butter made now and potted, or in prints put in brine, require but little salt, and will eat like fresh butter to the middle of winter. But every house-

keeper should make good butter all winter; with a proper system, and a few cows well fed and cared for, it is perfectly easy to have nice tasted and well colored butter in the coldest weather.

I venture to recommend the following recipes.—The first, now that fresh strawberries or other fruits are not to be had, will answer for canned strawberries, whortleberries, gooseberries, &c., and peaches cut in small pieces, makes also a delicious cake, I think better than the strawberry. It is a superior breakfast or tea dish. It is bread and dessert too:

STRAWBERRY SHORTCAKE.

Make and bake a light shortcake—that is, make it up with buttermilk or sour cream, with soda in it; some lard also, of course; then split it in three pieces, put the bottom crust on a plate, strew strawberries and sugar on it, then the middle or soft part of the cake and cover the same way with the berries and sugar; then put on the top crust and return to the oven awhile.

As this is oyster season, I give you a dish from the *German Town Telegraph*, and having tried them I can safely recommend them. *Oyster Salad*: use cold parboiled oysters in place of chicken, with celery or lettuce, and a mayonnaise, or American salad dressing. It is splendid!

SCALLOPED IN A PAN.

Mix well the finely-chopped yolks of six hard-boiled eggs, six ounces of bread crumbs, three salt-spoonsful of salt and one each of ground cloves, mace and white pepper. Blanch one hundred oysters, put them in a deep puddling dish, in layers, alternately with the egg and crumbs, finish with the latter, and on the top spread two ounces of butter cut into small dice. Bake in a quick oven from twenty to thirty minutes.

They are also very nice, the oysters being finely chopped with the bread and eggs, and baked in small scallop-edged cake pans.

The latter way I like best.

After eating or while eating, a little temperance drink does not come amiss with ladies as well as gentlemen, I therefore give you a recipe, taken from an *Agricultural Journal*, the name of which I regret I have forgotten.

Ginger Wine.—Take sugar, 12 pounds—Water, 3½ gallons—Ginger, 4 ounces. Boil them together for half an hour; when cooled to 75 degrees, add the rinds of six lemons and some good yeast; let it ferment for ten or fourteen days, then add a pint of brandy and bottle for use. Tie the corks tight. This is an excellent stomachic, and very popular in England as a cheap substitute for grape wine. I wonder if it is so nice? Suppose you lady friends of mine make some and let us see if it is all it is cracked up to be.

This to me is a glorious season of the year. I love autumn—I love November most of all her sisterhood of months. With the poet:

"I love to rest 'neath some aged oak,
 On the trunk of a fallen tree,
 Where the silence deep, alone is broke
 By the hum of the passing bee.
 There's a grateful spell in a lonely hour,
 A joy which the silence gives;
 When the voice of the world hath lost its power,
 'Tis then that the spirit lives.

* * * * *

The orange robe on those maple trees,
 And the Beechen's Syrian dye,
 When swept, alas! by wintry breeze,
 Will fall and unheeded die—
 The fading flower, the falling leaf,
 Proclaim in a silent tone;
 The running stream and the gathered sheaf
 All speak of a summer down."

FOR BRUISED TREES use the sifted hard wood ashes mixed with clear, fresh cow manure, which makes soon a solid mass; the amount of potash contained in the ashes not permitting the insects to live. Ashes may also be recommended for the preservation of seed potatoes, dusting them with it when taken out for planting in February—thus preventing their premature germination.